# Voted In, Standing Out: Public Response to Immigrants' Political Accession

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#### Abstract

What is the reaction of the host society to immigrants' political integration? We argue that when they win political office, immigrants pose a threat to natives' dominant position, triggering hostility from a violent-prone fringe, the mass public and the elites. We test these dynamics across UK general elections, using hate crime police records, public opinion data, and text data from over 500,000 newspaper articles. We identify the public's reactions with a regression discontinuity design of close elections between minority-immigrant and dominant group candidates. Our findings suggest a public backlash against ethnic minority immigrants' integration into majority settings.

Key words: Immigrant Integration, Representation of Immigrant-Origin Ethnic Minorities, Hate Crime, Exclusionary Attitudes, Media Portrayals of Immigrants JEL Codes: J11, J15, Z13

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# 1 Introduction

What is the response of dominant-group natives to ethnic minorities' success at integration in political institutions?<sup>1</sup> It has long been argued that the political and economic ascendance of a minority group can trigger a hostile, and at times violent, backlash from members of the majority group concerned by a real (Bobo, 1983) or perceived (Blumer, 1958) threat to the status quo. Hostility against minority groups can occur in response to structural social changes like population shifts (Blau, 1977) and economic restructuring (Autor et al., 2020), as well as the increasing political power of previously disenfranchised groups (Van Dyke and Soule, 2002). Such hostility, expressed as violence or exclusionary attitudes, is in part reactionary and can be a means of reasserting social control (King and Brustein, 2006).

The successful integration of immigrant-origin ethnic minorities in political institutions, in particular, is expected to be perceived as posing a challenge to the existing power and social position of the dominant-group natives (Wilson, 1978; Dancygier, 2010). Using parliamentary elections in the UK, in this study we explore the response of majority group members to ethnic minority immigrants winning political power through the ballot box.

We build on two related theories with the same observable implications for hostility against immigrant minorities. First, power threat theory explains intergroup conflict as a clash over valued (scarce) goods, including claims to social status and privileges (e.g. Blalock, 1967). Conflict, in power threat theory, is thus rooted in social-structural sources of group difference. Elections between ethnic minority and dominant-group candidates, in this context, are thus a clash over economic, political and social resources. Losing to an ethnic minority candidate is a threat to dominant-group natives' control over those resources.

Second, social identity theory maintains that individuals' sense of who they are is based on what groups they belong to. Because people strive for positive selfworth, when the groups that are the basis of their social identity are negatively evaluated, people challenge their negative status and attempt to make their group

<sup>&</sup>lt;sup>1</sup>We use the term *immigrant* to refer to both first- and later-generation immigrants. We use it interchangeably with the term *ethnic minority*, as many of the numerically sizable minority groups in Western democracies have recent immigrant origins.

more positively distinct (Tajfel and Turner, 1979). Conflict, in social identity theory, is thus based on group categorization and social status differentiation. Elections, in this context, inherently entail a social comparison. Dominant-group natives' equate an electoral loss to a threat against their social identity, and in turn their self-concept.

Both theories imply that minority victories trigger threats against the dominant group (either rooted in concerns about resources or about identity and social status). Both theories assume that conflict results from dominant group desires to suppress such threats. We argue, in addition, that close elections heighten such threats, reinforcing the hostile response to a minority victory. First, competition incentivizes political elites to manipulate communal grievances (Horrowitz, 1985). Relatedly, political competition strengthens ethnic identities, as ethnicity is used as a mobilization tool in the competition for power and resources (Eifert, Miguel and Posner, 2010). Second, close elections motivate voters to consume more information about the political context and to process it more carefully (Huddy, Mason and Aarøe, 2015). As such, a close election plays an informational role about the status, power and mobilization capacity of minority groups. While our research design does not permit us to discriminate between power threat and social identity theories, the close correspondence we find between hostility against immigrant-minorities and minority electoral victories underscores the political role of threat and of dominant group efforts to halt it.

Our study addresses two limitations of existing studies that contend that when marginalized groups gain political power, the dominant group responds with greater hostility. First, past work has had a hard time establishing a causal relationship between minorities' political power gains and dominant group backlash. Proxy measures commonly used in the extant literature such as the size of the minority group (Quillian, 1995; Green, Strolovitch and Wong, 1998) do not necessarily capture the group's political power, even as they indirectly measure competition for scarce resources. Studies that capture minorities' political power with direct measures such as the ratio of minority-to-majority votes in recent elections (D'Alessio, Stolzenberg and Eitle, 2002), the share of legislatures that are members of the minority group (Van Dyke and Soule, 2002), and whether a minority holds political office (Jacobs and Wood, 1999) are vulnerable to identification concerns. Particularly, from omitted variable bias—by failing to account for unobserved relevant characteristics that determine both minority political power and anti-immigrant attitudes and behavior—and from problems of reverse causality. Consistent with our theoretical expectations, we address these concerns by using a regression discontinuity design of close parliamentary elections, comparing constituencies where a minority MP candidate narrowly wins versus constituencies where a minority candidate narrowly loses.<sup>2</sup>

The second limitation of existing work is its ambiguity with respect to which members of the majority group respond negatively to gains in minority political power. Much of the literature focuses on violent backlash in the form of hate crimes (Dugan and Chenoweth, 2020), lynching (Hovland and Sears, 1940; Olzak, 1990), and inter-racial killings (D'Alessio, Stolzenberg and Eitle, 2002). However, such heinous crimes are usually perpetrated by the more extreme members of society, and thus a focus on extreme (and relatively rare) forms of violence leaves open the question of whether such negative behavior and attitudes are more widely shared among majority group members. And while admittedly some studies have established a correlation between minority political power gains and mass public opinion (e.g., Fossett and Kiecolt, 1989; Quillian, 1996), it is unclear whether the conditions that trigger violent responses are ones that also trigger less extreme (e.g., attitudinal) responses.

We address this concern by exploring—within the context of a single (electoral) event—outcomes at three different societal levels. Specifically, we examine: (a) hate crimes (which is a behavior at the tail of the societal distribution); (b) attitudes toward migrants (which captures mass public opinion), and (c) media tone towards migrant groups (which reflects the attitudes and behavior of elites). We study the reaction of these three societal segments to the same event (the election of a minority candidate in close elections) separately from each other, as they may not necessarily respond in the same direction (or magnitude).

Leveraging close election results between minority-immigrant and dominant group candidates, we find that the accession of members of minority immigrant groups to political office in the last four UK general elections triggered a backlash against their communities. In constituencies where ethnic minority candidates narrowly win, com-

<sup>&</sup>lt;sup>2</sup>Relatedly, Kuipers, Nellis and Weaver (2021) identify the effect of extremist parties winning power, rather than the effects of electing minorities, on exclusionary attitudes.

pared to where they narrowly lose, the subsequent hate crime rate is significantly higher. Three months after the election we identify an effect of 0.88 standard deviations, which corresponds to a 68% increase in hate crime relative to the average hate crime rate in constituencies where minority candidates narrowly lose. Similarly, we find that narrowly winning a parliamentary seat affected mass attitudes toward immigrants, significantly increasing the share of survey respondents who state that too many immigrants have been let into the UK. The size of the effect corresponds to a 66% decrease in inclusionary attitudes (or 0.65 standard deviations). Finally, we assess elites' response by analyzing text from over 500,000 newspaper articles that we matched to the ethnic background of the candidates and to their constituencies. Using natural language processing techniques, we then compute a measure of negative speech about a candidate's ethnic group. Three months after the election, we find a difference of 20 percentage points (or 0.66 standard deviations) between the proportion of negative mentions about the narrowly winners' and the narrowly losers' ethnic group.

Our paper contributes to the large literature on intergroup conflict that is rooted in Blalock's 1967 original conceptualization of power threat theory. While the correlation between gains to minority political power and majority group backlash is well-established, we provide instead causal estimates of such a potential backlash. In addition, we show within the same case that the backlash against political gains by a minority group is not limited to a violent-prone fringe (recall—hate crimes are relatively rare events) but is also observed among the mass public and the elites.

Moreover, consistent with threat-triggering concerns, subgroup analyses suggest that the hostile response is concentrated on candidates who pose greater threat to the status quo—that is, candidates standing with left-leaning parties (who are more likely to advance pluralistic and redistributive policies challenging social hierarchies). And it manifests itself in particular in the right-wing media, which arguably represents a segment of the dominant group that is most threatened by pluralistic values and economic redistribution.

We also contribute to a growing literature on the determinants of hate crimes that target minority groups.<sup>3</sup> Specifically, we enrich work on situational trigger events, which hitherto focused on reactions to unexpected shocks (Dipoppa, Grossman and

<sup>&</sup>lt;sup>3</sup>See Green and Spry (2014) and Dancygier and Laitin (2014) for useful reviews.

Zonszein, 2022), and to minorities perpetrating terror attacks (Deloughery, King and Asal, 2012) and serious felonies (Jäckle and König, 2018). We show that minority candidates winning parliamentary elections can similarly trigger a violent response, arguably because political ascendance of minorities heightens among members of the dominant group a sense of threat to the hierarchical status quo.

Only a handful of studies assess variation in immigration media coverage explained by immigrant-related events. Those that do are mostly concerned with large-scale terrorist attacks perpetrated by members of minority groups, and focus on coverage by the national media (Vliegenthart, Boomgaarden and Boumans, 2011; Bleich, Nisar and Abdelhamid, 2016). Here, we assess whether and how the successful integration of migrant groups to their host political institutions affects the media coverage of migrants. In so doing, we contribute to the political communication literature by showing that the electoral success of a migrant group changes the local media coverage of that group in terms of both attention and valence.

Finally, we contribute to a body of literature on the effects of historically underrepresented groups in political office. Existing work notes that mandated representation of women steers policy towards better reflecting women's preferences (Chattopadhay and Duflo, 2004), that mandated representation of ethnic minorities increases the level of transfers targeted towards these minorities (Pande, 2003), and that the presence of ethnic minority higher-office incumbents promotes coethnics' participation in down-ballot races (Fraga, Gonzalez Juenke and Shah, 2020). These studies suggest that the political inclusion of historically underrepresented groups can strengthen democratic institutions by increasing the equality of representation and of political engagement. Our findings, however, warn of a possible backlash against the communities associated with minority representatives.

# 2 Minority accession and intergroup hostility

We argue that dominant-group natives respond with hostility to threats triggered by ethnic minority electoral victories. We situate this argument within the theoretical framework of power threat and social identity theory.

### Power threat theory

A central tenet of classic minority-group threat theories is that real or perceived intergroup competition for scarce resources provokes hostility. Group conflict involves not only objective conditions of competition between members of different groups but also the subjective perception that outgroup members pose a threat to the dominant group's valued resources, norms and traditions, or preferred social stratification.

Minority-group threat theory provided the theoretical foundation for a longstanding body of research on inter-racial/ethnic relations. Here, minorities occupying spaces traditionally dominated by an ethnic majority group are perceived to pose a threat to the majority's social, political, and economic resources. Empirically, this body of work consistently finds a positive relationship between the relative size of a minority population and hostility against that minority group. As the relative size of the minority population increases, the threat increases as well by, for example, heightening interethnic competition for scarce resources like jobs, housing, education, and health care (an economic and social threat) (Hardin, 1995), or by increasing the potential for minority political mobilization (a political threat) (Blalock, 1967). As such threats increase, the willingness of (some) dominant group members to allow minorities in their life spaces decreases, and derogation of minorities increases.

Evidence of such a dynamic has been provided in the context of rich democracies by relating the relative size (change, or rank) of a minority population to racial inequality (Wilcox and Roof, 1978), hate crimes against minorities (Cikara, Fouka and Tabellini, 2021), white's attitudes toward racial segregation (Wilson, 1978), and anti-immigrant prejudicial attitudes (Quillian, 1995). Aside from minority-group threat theories based on competition for scarce resources, the hostile response to changing ethnic demographics in advanced democracies has also been explained as a reaction to a cultural identity threat (Alesina and Tabellini, 2022).

Besides the relative size of a minority group, other threat-triggering conditions have been discussed in the literature. Blalock (1967)'s central link between intergroup conflict and competition for scarce resources has naturally been extended to the link between intergroup conflict and economic conditions. In particular, worsening of economic circumstances among dominant group members has been shown to trigger hostility against minorities (Sharma, 2015). Such a hostile response is not exclusive to those directly in economic competition with minorities and immigrants, as dominant group members respond to the perception that they will lose their economic advantages over the subordinate group (Quillian, 1995). Accordingly, empirical studies find a negative relation between minority-to-majority unemployment and majority-on-minority crime (D'Alessio, Stolzenberg and Eitle, 2002), a positive association between job loss and militia activity (Van Dyke and Soule, 2002), and a positive link between unemployment and anti-immigrant attitudes (Mayda, 2006).

A handful of studies addresses minority-group threat theory specifically from its political threat component. D'Alessio, Stolzenberg and Eitle (2002), for example, use the ratio of black-to-white votes cast in the South Carolina general election to measure threat to the dominant group's political status. Jacobs and Wood (1999) use instead the racial identity of mayors in US cities, finding a significant relation-ship between the presence of black mayors and white killings of blacks. In discussing ethnic conflict, Hardin (1995) conceptualizes public office as a positional good which is fundamental in the allocation of distributional goods like welfare benefits. Relatedly, Dancygier (2010) explains immigrant-native conflict as arising from immigrants' costly material demands to which political parties are responsive. Natives attack immigrant-origin minorities when their presence reduces natives' material welfare. Dancygier (2010) tests this argument by operationalizing immigrant political power as the share of minorities in local councils, finding a positive association with conflict only under conditions of economic scarcity.

### Social identity theory

According to social identity theory, individuals form their self-identity and define their interests based on group membership, and they evaluate their own group by comparing its attributes to those of other groups (Shayo, 2009). Importantly for the context we study here, an outgroup becomes a target of comparison when circumstances, like elections, make that outgroup more salient. When a comparison against an outgroup is unsatisfactory, people attempt to make their group more positively distinct (Tajfel and Turner, 1979). The goal of such a strive for differentiation is to maintain or achieve social superiority, and by extension, a positive self-worth. As such, the process of group differentiation is essentially competitive, and intergroup competition is set by social comparison. Insofar as social differentiation rests on comparisons related to status, social competition is expected to be linked to intergroup conflict, as individuals exert effort to change their group's social position.

#### Election results as threat

Building on power threat theory, we argue that elections between ethnic minority and dominant-group candidates establish the arena for intergroup competition for diverse valuable (scarce) resources. Losing an election to an ethnic minority candidate, in turn, poses a threat to dominant-group natives' access to such resources. Building on social identity theory, we argue that elections between ethnic minority and dominant-group candidates trigger intergroup competition for social status. By differentiating winners from losers, elections are inherently a social comparison process. Intergroup conflict results from such a comparison process, as it rests on a real or perceived threat to the dominant group's status. Because in electoral times group identity is the basis of stronger emotional attachment, the perception of immigrant-minorities as outsiders is heightened (Huddy, 2001). The electoral loss of a dominant-group's candidate is equated to threats against the group, particularly threats posed by an outsider group. Similar to the reactions of sport fans, an electoral loss may produce negative feelings and hostile behavior (Crisp et al., 2007), because it has direct implications for a person's standing and sense of self.

Both power threat and social identity theories imply that losing an election to an ethnic minority candidate poses threats to the resources and status of members of the dominant group, to which they react aggressively to suppress them.

#### Close elections heighten threats

Close elections between ethnic minority and dominant-group candidates are more likely to be perceived as posing threats to the dominant group, and therefore more likely to provoke conflict. First, when public office is contested by candidates of different ethnic groups it is often seen as a means for accommodating coethnic preferences (Dancygier, 2010). When elections are not close, there is no uncertainty about who benefits from holding office, and hence election results are neither salient nor they reveal new information about the distributional consequences of the electoral outcome. By contrast, in close elections competition between groups over an uncertain distributional outcome is more salient, and given the higher stakes, it is more likely to result in conflict. Second, in close elections between candidates of different ethnic groups political elites have incentives to stoke communal grievances in order to win votes (Horrowitz, 1985), often resulting in violence. In addition, as a result of such a mobilization, ethnic identification (Eifert, Miguel and Posner, 2010) and ethnocentrism are heightened, frequently expressed as hostility against outgroups (LeVine and Campbell, 1972). Third, when elections are close, people are motivated to process more information about their political and electoral context (Huddy, Mason and Aarøe, 2015). Close elections, in that sense, increase the salience of contesting minority groups and of threats involved in losing political office.

Recent work, in fact, suggests that dominant group members are more likely to respond to changing demographic context with exclusionary attitudes, when primed by external stimuli that reinforces the threat, such as negative rhetoric about immigrants that becomes nationally salient (Hopkins, 2010). Consistently, empirical studies find that providing dominant ethnic group members information about the changing ethnic demographics of a nation (or an individual's local context) triggers multiple concerns about their status, standing, and potential vulnerabilities, which, in turn, promote derogation of ethnic minorities (Craig, Rucker and Richeson, 2018). As such, we argue that a close election may operate as the external stimulus (or informational mechanism about the size, growth, and mobilization capacity of the ethnic minority population) that connects the dominant group changing demographic context with their behavior and attitudes toward minorities. Such a stimulus (or information cue) reinforces the hostile response to losing an election to an ethnic minority candidate.

# 3 Ethnic minority candidates and Members of Parliament in the UK

We test the above argument using the case of minority candidates in close parliamentary elections in the UK. The number of ethnic minority candidates has been increasing over time, in part due to a 2010 agreement between the three biggest parties to set internal targets for the improvement of minorities' representation. As a result, the number of ethnic minority MPs increased between 2010 and 2019, from 26 to 65 (or 10% of Members of the House of Commons).<sup>4</sup> In the last four general elections, ethnic minority candidates have competed in 58% of all parliamentary con-

<sup>&</sup>lt;sup>4</sup>If the ethnic make-up of the House of Commons reflected that of the UK population, there would be about 93 Members from ethnic minority backgrounds (Uberoi

stituencies in England and Wales and have won in 28% of the constituency-elections in which they stood.

MPs in the UK are constituency oriented, and the personal relationship they cultivate with their constituents make them highly visible.<sup>5</sup> The turn towards a focus on constituency services was set in motion by the post-war welfare state, which increased citizens' interactions with the state as they navigated a complex set of rules and eligibility criteria. More recently, reforms in Parliament—like the foundation of the Backbench Business Committee—have further reinforced the centrality of constituency concerns (McKay, 2020). Although the ability of individual MPs to engage in redistribution is restricted by parliamentary institutions (e.g., voting in accord to the party whip), there is evidence that MPs often trade off their time to participate in government-opposition debate (one of their most fundamental resources) for constituency representation (Crewe, 2015). Moreover, MPs are frequently involved in local casework, even when matters are legally a responsibility of local government, like housing or pensions (Cain, Ferejohn and Fiorina, 1984).

Relevant to our study, evidence from candidate and MP surveys suggest that ethnic minority MPs are more eager to represent fellow minorities than their white counterparts. Minority MPs are also more likely to believe that racism held back British minorities, and as such, it is their duty to address long-standing inequalities by prioritizing minority concerns. However, this is less true of Conservative politicians (Sobolewska, McKee and Campbell, 2018). On the demand side, immigrants believe that coethnic politicians better understand the interests of their communities and take these interests to heart (Bloemraad, 2006).

In this context, control over political office by a member of an ethnic minority group can be viewed as a significant threat to the privileged position of the dominant group. Such a threat may be more salient in a competitive context in which the increased political representation of ethnic minorities is backed by institutional efforts to increase their representation (King and Brustein, 2006), such as the 2010 multiparty agreement mentioned above. The threat may be based on objective conditions of competition: ethnic minority MPs advocate for redistributive policies benefiting

and Tunnicliffe, 2021).

<sup>&</sup>lt;sup>5</sup>About 66% of British constituents can spontaneously recall the name of their MP; twice the recall level of US Member of Congress (McKay, 2020).

their fellow minorities, and they may use constituency services to redirect attention to marginalized groups (Dancygier, 2010). However, threats can also be based on the subjective perception that ethnic minority MPs pose a threat to the hierarchical social order. As such, the presence of ethnic minority politicians in Parliament may signal the demise of a 'white political elite' (Clark, 1994).

Moreover, minority politicians have been shown to increase minorities' sense of political efficacy, enhancing minorities' future political participation, and in turn, the prospects of further electing minority group representatives (Maxwell, 2012). In sum, we study a context in which ethnic minority political victories pose a combination of objective and subjective threats for dominant group members that may find their expression in hateful behavior and exclusionary attitudes.

### 4 Data and outcome measures

We measure the possibility of a violent backlash with police recorded monthly hate crime counts. Hate crime offenders are not representative of the broader public: most offenders in the UK are white, male and under 25 (Roberts et al., 2013). We therefore measure mass response with publicly available public opinion data. Particularly, we measure attitudes towards immigrants and ethnic minorities from post-election surveys. Finally, we assess the reactions from elites with the valence of newspaper articles about the candidates' ethnic group. Unlike hate crimes for which we do not know the victim's identity, and public opinion data where questions are broadly about immigrants and minorities, the newspaper data allows us to measure responses specifically targeting the ethnic group of a candidate. We collect these data for the longest period available covering the general elections from 2010 to 2019. In Table A.1 we present summary statistics for our main outcome, treatment and predetermined variables, and below we describe them with detail.

### 4.1 Hate crimes

**Data** Following a FOI request, the Home Office provided us with monthly hate crime counts in England and Wales as recorded by the police, desegregated by Community Safety Partnership (CSP) and Local Authority District (LAD) from April 2014 to September 2020. We requested such data by offense sub-code for racially or

religiously aggravated offenses (e.g. racially or religiously aggravated assault with injury) and for the non-aggravated equivalent offenses (e.g. assault with injury).<sup>6</sup> Overall, the data contains 327,840 hate crimes, of which 61% happen in constituency-election years where minority candidates run for a seat in parliament.

**Outcomes** The main variable measuring violence against ethnic minority immigrants is the monthly number of hate crimes per 1,000 residents in a given constituency. We focus on every month after the general election, from the first month, which includes the election date, up to nine months later, corresponding to the maximum period of available crime data after the 2019 election. As a placebo outcome, we use the monthly constituency crime rate of equivalent offenses that are not motivated by racial or religious animus. Appendix B describes the process we follow to assign hate crimes from LADs into parliamentary constituencies, including a validation exercise.

### 4.2 Mass public opinion

**Data** Public opinion data are from the 2010, 2015, 2017 and 2019 British Election Study, which are face-to-face post-election surveys fielded immediately after a general election, and representative of UK eligible voters. We focus on white respondents and, for comparability, subset the data to England and Wales—the two countries for which we have hate crime data. Pooling together the data of these four election surveys, we have a sample of 2,200 respondents in constituency-elections where minority candidates run for a seat in parliament, and at least one respondent

<sup>&</sup>lt;sup>6</sup>We do not have information from 30 CSPs that do not use offense sub-codes to report hate crime. Additionally, we do not have information about the identity of perpetrators and victims. Therefore, we cannot identify whether victims share a candidate's ethnic group. However, while victims probably do share a candidate's ethnicity, there is reasons to believe that because of misperceptions and ignorance regarding victim's identity, hate crimes generalize to all those who "appear" sharing a candidate's ethnicity, as has been documented for the Sikh community post-9/11 (e.g. Ahluwalia and Pellettiere, 2010). If that is the case, our estimates would be capturing that spillover into candidate's unrelated ethnic groups. Moreover, only 9% of the religiously motivated hate crimes are anti-Christian (Home Office, 2020).

in 45% of these constituency-elections.<sup>7</sup>

**Outcomes** The main variable measuring inclusionary attitudes towards immigrants is computed with an item that asks respondents across the last three election surveys whether too many immigrants have been let into the UK. To assess the robustness of our results beyond this item, we compute two additional outcomes that use all other available survey items on attitudes towards immigration and ethnic minorities. These items are either included in all survey years, but the wording of questions and answers (and their range) changes or are not included across the four elections. We use an index of left–right views on topics unrelated to immigration as a placebo outcome. Appendix C describes with more detail the survey items and the computation of the outcome variables (including harmonization across years).

### 4.3 Media tone toward migrant groups

**Data** We use data from over 500,000 articles from 350 national, regional and local UK newspapers, covering the general elections from 2010–2019.<sup>8</sup> This data is from Common Crawl, which is an open repository of web crawl data. We assume that an article refers to a candidate's ethnic group when three conditions are met: 1) the publication date is on election day and up to 10 months after each general election<sup>9</sup>, 2) the article contains mentions of terms referring to the candidate's country or nationality of origin, which are extracted with the named entity annotator of CoreNLP and 3) such mentions co-occur in the article with a mention referring to the candidate's constituency. The constituency is extracted by tokenizing the article

<sup>&</sup>lt;sup>7</sup>Each constituency-election has between 1 and 16 respondents, with a median of 8. Since the data is not representative of constituencies, we analyze it at the individual level.

<sup>&</sup>lt;sup>8</sup>The data includes opinion articles, news stories and possibly letters to the editor. Therefore, the articles may be capturing a mixture of elite and broader societal behavior rather than uniquely reflecting elite behavior. Yet, we contend that the content mostly reflects elite behavior, given that it is curated by the editors and their staff.

<sup>&</sup>lt;sup>9</sup>Ten months correspond with the maximum number of months between the 2019 election and the most recent article.

with CoreNLP and looking for tokens which match place names in the Index of Place Names in Great Britain, and mapping to the corresponding constituency. Overall, this data includes almost 150,000 mentions from 156 newspapers that meet these three conditions about the candidates' group.

**Outcomes** Using CoreNLP's five-category sentiment annotator, we compute a measure of tone in elite speech about the candidate's ethnic group. Particularly, we extract from the relevant articles the sentiment of the sentences mentioning the candidate's country and nationality terms. CoreNLP's sentiment annotator improves upon bag of words sentiment classifiers that ignore the order of words and assign positive points for positive words and negative points for negative words and then sum up these points (e.g., Young and Soroka, 2012). Instead CoreNLP uses a model that builds up a representation of whole sentences based on their grammatical structure. As such, it computes the sentiment based on how words compose the meaning of longer phrases, without losing important information, like sentiment change and scope of negation (Socher et al., 2013). In addition, this annotator is particularly useful in capturing the sentiment of sentences, which is the task at hand, as it is trained on a large corpus of (more than 200,000) human labeled phrases, as opposed to labeled documents or chunks.

Using the sentiment classification of each of the mentions of a candidate's ethnic group, we compute our main outcome measuring an elite response by taking the monthly ratio between the negative valence mentions and the total number of mentions about the candidate's ethnic group. We focus on such a ratio rather than on the number of negative mentions, because the result of the election may increase the salience of the winning candidate's ethnic group. When this is the case, our interest is on evaluating whether such an increase in salience is of speech with specific valence (i.e. proportionally more negative or positive). For this reason, we also compute the proportion of positive- and neutral-valence mentions about the candidate's ethnic group, which we use for assessing a generalized increase in salience.

To increase confidence that our main measure of proportion of negative mentions is indeed capturing the valence towards the candidate's ethnic group, as opposed to characterizing the constituency, we compute a placebo measure which includes mentions about countries and nationalities in North America, Western Europe, and Australia and New Zealand in the candidate's constituency, which should not be affected by the identity of a winning candidate. Appendix D describes with greater detail the process to gathering the newspaper data and to computing the outcome measures. It also discusses validity of the named entity and sentiment annotators.

### 4.4 Election results and ethnic background of candidates

**Data** The data on general election results from 2010 to 2019 are from the Electoral Commission. We construct a database of the ethnic background of candidates by relying on previous classifications of a parliamentary candidate's ethnicity as white or Black, Asian, and minority ethnic (BAME). We build on these previous classifications by identifying the ethnic origin of BAME candidates based on their country of birth, and their parents and grandparents' countries of birth.

Collecting data on candidates is a difficult task as there is no single source of candidate data, either from the Electoral Commission, or from the political parties themselves. We rely on a range of sources including the 2010 British General Election Constituency Results, which contains the ethnicity of candidates running with the biggest three political parties: Conservative, Labour and Liberal Democrat. 76% of ethnic minority candidates stand in elections with one of these three parties.<sup>10</sup> For the 2015 and 2017 general elections we rely on the Parliamentary Candidates UK project, which collected the ethnicity of every candidate standing in these elections with an established party,<sup>11</sup> and on independent candidates if they are one of the top two finishers in a constituency. For the 2019 election we labelled whether a candidate is BAME by searching the profile of the more than 3,300 candidates and using information of candidates who have run before for a seat in parliament or who are sitting MPs. For candidates in this election, and to identify a candidate's country of origin for all election years, we rely on various sources including crowdsourced information by the Democracy Club, which collects candidates social media accounts (Facebook, Twitter, LinkedIn), campaign websites and their pictures.

We also cull information from party websites, regional and local newspapers, and especially from ethnic newspapers (e.g., Asian Voice), which usually include a list

<sup>&</sup>lt;sup>10</sup>Based on data from the 2015 general election, which is the next closest election for which we have data on every candidate.

<sup>&</sup>lt;sup>11</sup>Labour, Conservative, Liberal Democrat, Scottish National, Plaid Cymru, UKIP, Green and Northern Ireland parties.

of co-ethnic candidates in an election special issue. We classify a candidate's ethnic origin only when the candidate self-identifies as ethnic minority on their social media profile, personal website, their party's website, or if more than one information source confirms the candidate's origin. We do not include national and ethno-linguistic minorities (e.g, Welsh), as these communities are not classified as minorities in the data we are relying on.

Across the last four general elections 923 ethnic minority candidates from 334 constituencies (58% of all constituencies) stood for parliament in England and Wales, with increasing numbers over time (Figure E.1a). Because our estimation strategy involves the strongest minority candidate in each constituency, our sample is of 662 candidates with 28% winners. Perhaps contrary to conventional wisdom, these candidates are fairly split across the biggest parties and across geographical areas (Figure E.1b and E.1c).

### 4.5 Constituency characteristics

We use data from the 2001 and 2011 Census (accessed via nomis, Office of National Statistics) to compute predetermined variables of characteristics of a constituency that may determine both an ethnic minority win and our outcomes: hate crime, exclusionary attitudes towards immigrants and minorities, and negative media tone about migrant groups. For example, the constituency vote share for UKIP and BNP in the previous election, constituency population share that is foreign born, ethnic or religious minority, unemployed, the share of households with high deprivation, and population density.

## 5 Estimation method

We test whether the accession of members of ethnic minority immigrant groups to political office triggers a backlash against their communities by comparing our key outcome measures (monthly hate crime rate, exclusionary mass attitudes, monthly proportion of negative mentions about a candidate's ethnic group in the media) across constituencies with minority candidate narrowly winners and constituencies with minority candidate narrowly losers (or equivalently, with dominant-group candidate narrowly winners). Specifically, we use a sharp RD design that leverages close parliamentary elections. The focus on close elections follows our theoretical framework but, naturally, is also necessary for causally identifying backlash effects because constituencies with and without competing minority candidates differ from one another in many ways. In contrast, constituencies where a minority candidate narrowly wins or narrowly loses a close race to a dominant group candidate are, on average, otherwise identical.

Because the ethnic minority candidate vote margin is the running variable in our RD design, an ethnic minority candidate must stand for Parliament for their constituency to be included in our estimation sample. This is the case for 18%, 29%, 32%, 37% of the England and Wales parliamentary constituencies in the 2010, 2015, 2017, and 2019 general election, respectively. The RD strategy estimates a LATE that is representative of these constituencies. Table F.1 characterises the constituency-elections in our sample as a comparison to all constituency-elections in England and Wales.

Specifically, we estimate the following linear equation:

$$Y_{itm} = \alpha + \beta_1 Victory Margin_{it} + \tau Ethnic Minority Victory_{it} + \beta_2 (Ethnic Minority Victory_{it} \cdot Victory Margin_{it}) + \epsilon_{itm}, \quad (1)$$

where  $Y_{itm}$  is one of our outcome variables measured for constituency *i* at election year *t*, and month *m* after election.<sup>12</sup> *VictoryMargin<sub>it</sub>* is the running variable, which is defined as the difference between the vote share obtained by the strongest ethnic minority candidate in a constituency-election year and the vote share obtained by its strongest dominant group opponent. This variable controls for the minority's vote-share winning margin. *EthnicMinorityVictory<sub>it</sub>* is an indicator variable for whether the ethnic minority candidate wins a seat in Parliament. The quantity of interest is  $\tau$ , which captures the RD estimate of the effect of an ethnic minority victory.

We estimate  $\tau$  by fitting Equation 1 to a sample that includes only constituencyelection years with vote-share winning margins within the symmetric mean squared

<sup>&</sup>lt;sup>12</sup>Media tone is measured for ethnic group e, constituency i, election year t, and month m, and the public opinion outcomes are measured for individual j, in constituency i at election year t, and therefore the outcome and error term are indexed by *eitm*, *jit*, respectively.

error (MSE) optimal bandwidth around the victory margin threshold.<sup>13</sup> We compute the MSE-optimal bandwidth using Calonico, Cattaneo and Titiunik (2014)'s adaptive bandwidth selection algorithm, and we estimate the standard error of  $\tau$  in the conventional way and with the author's robust bias-correction in order to compute *p*-values and 95% confidence intervals with such a correction.<sup>14</sup>

For efficiency gains, we control for predetermined characteristics of the candidates (e.g. incumbency), constituencies (listed in Section 4.5), and survey respondents (for public opinion outcomes) that may determine both our outcomes and a minority win. We cluster the standard errors  $\epsilon_{itm}$  by constituency-election to account for dependence of hate crimes and media tone within a constituency across months after an election, and for dependence of respondents' attitudes within a constituency and election year.

# 6 Results

### 6.1 Hate crimes

In Figure 1a we present the effect of minority candidates' victory in close parliamentary races on hate crime, three months after the general elections. To the right of the victory threshold, the line (with 95% confidence intervals) shows for different values of the victory margin, the average monthly hate crime rate in constituencies where minority candidates win. To the left of the threshold, the line shows the average monthly hate crime rate in constituencies where minority candidates lose. As these lines show, there appears to be a jump at the victory threshold; when a minority candidate goes from narrowly losing to narrowly winning a seat in Parliament, hate

<sup>14</sup>The robust bias-correction accounts for the bias introduced by the local approximation of the linear polynomial around the victory margin threshold, and for the variance in the estimation of that bias. The robust bias-corrected standard error is larger than the conventional one, which implies that our estimates are conservative.

<sup>&</sup>lt;sup>13</sup>The interaction between the two variables in Equation 1 allows us to estimate  $\tau$  by fitting local-linear polynomials with different slopes on each side of the victory margin threshold.

crimes in the candidate's constituency increase by 7 per 100,000 residents.<sup>15</sup> This effect is equivalent to 0.88 standard deviations, and corresponds to a 68% increase in hate crime relative to the average hate crime rate in constituencies where minority candidates narrowly loose.<sup>16</sup>

In Figure 1b we present our estimates of the effect on hate crimes by month since the general election. While we find some suggestive evidence that the effects decay over time, we note also that across months effects are not statistically distinguishable from each other. In appendix Table G.1, we present these effect estimates, estimates of their inference, size of the MSE-optimal bandwidth, and effective sample (i.e. number of observations within the MSE-optimal bandwidth) and sample sizes. The table reports in addition estimates from a specification that does not include predetermined covariates. Across specifications the effects have the same direction and similar magnitude, though they are statistically significant only when we control for predetermined covariates.

#### 6.1.1 Validity tests and robustness checks

Placebo tests further suggest that the accession of ethnic minorities to political office is what incites the observed increase in hate crimes. First, we find no discontinuity in the rate of equivalent crimes that are not motivated by racial or religious animus at the threshold where minorities win a seat in Parliament (Figure G.1). Second, we find no discontinuities at the victory threshold in the rate of hate crimes before the general election (Figure G.2). These results suggest that the effects of a minority win on hate crimes are not explained by other dynamics in the constituencies where minorities win, like the intensity of crime.

For the RD results to be valid, and not confounded by unobserved differences in

<sup>15</sup>Since the average size of a UK constituency is about 70,000 eligible voters, a minority win results in additional 4.9 hate crimes in the average constituency.

<sup>16</sup>We want to remind the reader that our estimation method only identifies the hate crime response at the victory threshold. That is, we can *only* interpret the vertical distance between the two points where the lines touch the threshold, but we cannot interpret, for example, the slopes of those lines, as there are observables and unobservables that we do not control for that determine the hate crime response away from the threshold.



Figure 1: Ethnic minority victory effects on hate crime

Notes: In (a) lines represent the average monthly hate crime rate (with 95% confidence intervals) from local linear regression with covariate adjustment fitted to the sample of units whose vote-share winning margin is within the MSE-optimal bandwidth of +/-22 percentage points around the victory threshold. Points are the average monthly hate crime rate for equally spaced mimicking-variance bins. In (b) points are RD estimates of the effect of an ethnic minority victory and lines 95% robust bias-corrected confidence intervals.

the potential outcomes of the constituencies that elect ethnic minorities versus those that do not, candidates should not be able to sort around the winning threshold. First, the tests in Appendix G.3 show that there is no manipulation of the election results; the density of ethnic minority candidates is continuous at the threshold where minorities win political office. Secondly, in Appendix G.4 we show that the constituencies (and candidates) where ethnic minority candidates narrowly win do not differ in observable ways from the constituencies (and candidates) where candidates narrowly lose. These results validate the RD design identifying assumption.

Supporting further the robustness of the results, we find that the effect is not sensitive to the choice of bandwidth, and that results are robust to fitting quadratic rather than linear polynomials (Appendix G.5). In the hate crime response, we further isolate the ethnic identity of candidates from their political party affiliation by controlling for party indicators (Appendix G.6). We confirm as well that the minority victory effects on hate crime are not driven by a hate crime decay in constituencies with close minority defeats (Appendix G.8). Moreover, we confirm that hate crimes increase when minorities win a seat in Parliament with estimates from a difference-indifferences approach, although the magnitude of the effects is smaller (Appendix G.9) presents this analysis and considers differences in effect sizes). Finally, using only violent crimes that tend to not go unreported, we provide evidence that strongly suggests that our findings represent an increase in hate crime incidence and not merely an increase in hate crime reporting (Appendix G.10).

#### 6.1.2 Subgroup analysis

Grounded on threat theory, we assess whether the accession of ethnic minorities to political office interacts with conditions that make a minority victory more threatening: 1) local conditions, like migrant influx and economic downturn, are presumed to affect perceptions of relative deprivation, thereby heightening the zero-sum nature of electoral competition, and therefore the likelihood of a hostile response, 2) whether a candidate has a Muslim background, as Islam may raise concerns about 'threats to British life', for dominant-group members susceptible to ethnocentric movements, but possibly also for cosmopolitans whose socially liberal inclinations do not square with Islamic values (Dancygier, 2017), 3) the political affiliation of candidates, as Labour affiliated minorities have a more liberal ideology on racial and social spending issues, and are also more likely to address long-standing inequalities by prioritizing minority concerns (Sobolewska, McKee and Campbell, 2018), which in turn can trigger stronger concerns among members of the dominant group who would want to preserve the status quo, and 4) whether a constituency elects an ethnic minority candidate for the first time, activating new threat perceptions.

Consistent with Green, Strolovitch and Wong (1998), we find that the RD estimate of the effect of a minority win on hate crimes in constituencies with high influx of migrants over the last decade before the election is larger and statistically distinguishable from the estimate of the effect in constituencies with a low influx of migrants.<sup>17</sup> However, contrary to previous finding that immigrants' political power provoke immigrant-native conflict only in economically deprived places (Dancygier, 2010), we find that, while larger, the effect of a minority win in constituencies with a high increase in unemployment over the last decade before the election is not distinguishable from the effect in constituencies with a low increase (or even decrease) in unemployment (Figure H.2a).<sup>18</sup>

<sup>&</sup>lt;sup>17</sup>The test statistic of the difference in coefficients is t = 2.14.

<sup>&</sup>lt;sup>18</sup>The test statistic of the difference in coefficients is t = 0.69.

Regarding candidates religious backgrounds, we find suggestive evidence that the minority victory effects on hate crime are stronger in constituencies with standing minority candidates with a Muslim background (Appendix H and Figure H.1). We also find that the violent response to ethnic minorities winning political office concentrates in constituencies where those candidates hail from left-leaning parties (Figure H.2b). Conservative minority candidates and MPs not only do not prioritize minority concerns as their Labour counterparts do (Sobolewska, McKee and Campbell, 2018), but also their political ideology is appealing to the voters more likely to negatively respond to minorities winning office (Karpowitz et al., 2021). Thus, a Conservative minority win does not pose a threat to the status quo, as a Labour minority win does, muting the violent response.<sup>19</sup>

As these findings suggest, there is an interaction effect of minority background and political affiliation on hate crime. Tellingly, when we focus on races in which only white candidates stand for Parliament, we do not find that a white Labour close victory increases hate crimes after the election; the coefficients are close to zero and are not statistically significant (Figure H.3). This suggests that the backlash we document here is against victories from minority candidates standing with leftleaning parties, rather than a backlash against left parties' victories. That is, a candidate's political affiliation plays a role in backlash only insofar as the candidate is from a minority background.

Finally, if a minority candidate winning political power serves as an information cue that changes threat perceptions, then a violent response should be more likely in constituencies that elect a minority for the first time (Newman, 2013). While our main specification isolates incumbency effects,<sup>20</sup> here we assess such expectation by controlling for a variable that indicates whether a constituency has had a standing

<sup>&</sup>lt;sup>19</sup>A complementary explanation for the absence of a hate crime response to Conservative minority candidates is that they are assigned to more homogeneous constituencies with less inter-group interactions. Indeed, the Conservative party mostly assigns minority candidates to 'white' safe seats, where the ethnic minority population represents less than 20% (Byrne et al., 2020).

 $<sup>^{20}21\%</sup>$  of the constituencies-election years in our sample are represented by incumbents, and 44% of the winning candidates within the MSE-optimal bandwidth are incumbents.

ethnic minority MP at least once before each of the elections in our sample. We find that at least during the first five months after the general election the RD estimate of the effect of a minority win shrinks and is not statistically significant when we control for such a variable (Figure H.2c). This suggests that the violent response to minorities winning political office mostly happens in constituencies that elect minorities for the first time.

### 6.2 Mass public opinion

In Figure 2 we present the main effect of minority candidates' victory on mass attitudes towards immigrants after the general election. To the right of the victory threshold, the line (with 95% confidence intervals) shows the average proportion of white respondents who *do not* think that "too many immigrants have been let into the country" in constituencies where minority candidates have won. To the left of the threshold, the line shows the proportion of white respondents with such an opinion in constituencies where minority candidates lost. As these lines show, there is a drop at the victory threshold; when a minority candidate goes from narrowly losing to narrowly winning a seat in Parliament, the proportion of white respondents who hold inclusionary attitudes towards immigrants in the candidate's constituency decrease by 30 percentage points. This effect is equivalent to 0.65 standard deviations, and corresponds to a 66% decrease in inclusionary attitudes relative to the average attitude in constituencies where minority candidates narrowly lose.

In Appendix Table I.2 we present the effect estimates and all the other relevant statistics for different model specifications. The RD estimates are consistent and statistically significant across specifications. Because public opinion data is sparse, we refrain from assessing subgroup effects in this section, given power constraints.

#### 6.2.1 Validity tests and robustness checks

A placebo test further strengthens the validity of the results on mass attitudes. We find no discontinuity in respondents left—right ideology at the threshold where minorities win a seat in Parliament (Appendix I.1). This suggests that the effects of a minority win on mass attitudes towards immigrants are not confounded by other dynamics shaping respondents' ideological views in constituencies where minority candidates win.



Figure 2: Ethnic minority victory effects on attitudes towards immigrants

Notes: Lines represent the average proportion of respondents who do not think that "too many immigrants have been let into the country" (with 95% confidence intervals) from local linear regression with covariate adjustment fitted to the sample of units whose vote-share winning margin is within the MSE-optimal bandwidth of +/- 14.3 percentage points around the victory threshold. Points are the average proportion of respondents who do not think that "too many immigrants have been let into the country" for equally spaced mimicking-variance bins.

Furthermore, we do not find evidence of sorting around the winning threshold. First, the tests in Appendix I.2 show that there is no manipulation of the election results; the density of survey respondents is continuous at the threshold where minorities win political office. Secondly, the tests in Appendix I.3 show that the constituencies, candidates and survey respondents where candidates narrowly win do not differ in observable ways from the constituencies, candidates, and respondents where candidates narrowly lose. These two results validate the identifying assumption of the RD design. In addition, in Appendix I.4 we confirm that the results are neither sensitive to the choice of bandwidth, nor to the choice of polynomial. Furthermore, in Appendix I.5, we isolate a candidate's political affiliation from their ethnic identity, by controlling for party dummies, and we show that the results are robust to including such controls.

Finally, in Table I.3 we present the effect estimates on two additional attitudinal outcomes discussed in Appendix C. Across outcome measures and model specifica-

tions the effects have the same direction: inclusionary attitudes towards immigrants decrease in constituencies narrowly win by minority candidates. However, the somewhat smaller effect size on an index measure including stereotypical beliefs and attitudes towards diversity accommodation is not statistically significant, likely because the sample size is much smaller (as it only includes the 60% of respondents who were asked an additional survey component in 2017 and 2019).

### 6.3 Media tone towards migrant groups

We present our main finding on the media tone towards migrant groups in Figure 3a. The line (with 95% confidence intervals) to the right of the victory threshold shows the average monthly proportion of negative mentions about the winning candidate's ethnic group three months from the general election, and to the left the average monthly proportion of negative mentions about the losing candidate's ethnic group. As these lines show, at the threshold, where a constituency goes from narrowly electing a dominant group candidate to narrowly electing an ethnic minority candidate to Parliament, there is a jump in the proportion of negative mentions about the candidate's ethnic group. The estimated magnitude of such an increase in negative media coverage is about 20 percentage points (or 0.67 standard deviations) and is equivalent to an increase of 110% compared to the average proportion of negative mentions about the ethnic groups of the narrowly losing candidates.

In Figure 3b we present estimates of the minority victory effects on media tone by month since the election. We find suggestive evidence that the effects decay over time after the general election. The RD estimates of the effects of a minority win decrease in size around the seventh month after the election, however the monthly effects are not statistically distinguishable from each other. In Appendix Table J.1 we present these effect estimates and all other relevant quantities for different model specifications. Across specifications the effects have the same direction and similar magnitude, although for most of the analyzed months they are statistically significant only when we control for predetermined covariates.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup>The backlash we find from the media targets a candidate's ethnic group, rather than the candidate, as less than 1% of the articles used in this analysis include mentions of candidates.



Figure 3: Ethnic minority victory effects on media tone

(a) 3 months after general election

(b) 1–10 months after general election

Notes: In (a) lines represent the average monthly proportion of negative mentions about a candidate's ethnic group (with 95% confidence intervals) from local linear regression with covariate adjustment fitted to the sample of units whose vote-share winning margin is within the MSE-optimal bandwidth of +/- 12 percentage points around the victory threshold. Points are the average monthly proportion of negative mentions about a candidate's ethnic group for equally spaced mimicking-variance bins. In (b) points are RD estimates of the effect of an ethnic minority victory and lines 95% robust bias-corrected confidence intervals.

#### 6.3.1 Validity tests and robustness checks

To ensure that our measure of negative mentions is capturing the valence towards a candidate's ethnic group, as opposed to specific dynamics of the media covering a candidate's constituency, we assess whether a minority win affects a placebo measure that includes mentions about countries and nationalities in North America, Western Europe, Australia and New Zealand in the candidate's constituency. We do not find a discontinuity in the proportion of negative mentions about these placebo groups at the threshold where minorities go from narrowly losing to narrowly winning a seat in Parliament (Appendix J.1). The results of this placebo test further validate our findings on media tone towards politically salient migrant groups. In addition to this placebo test, we assess whether the proportion of negative mentions about a candidate's ethnic group is discontinuous at the minority victory threshold before the general election (Appendix Figure J.2).

We find no discontinuities—the estimates of the effect of a minority win on negative media tone before election are centered around zero (and are not statistically significant)—except for two months before the election; when there is a jump at the threshold in the proportion of negative mentions about the winner's ethnic group. Such an increase, however, is only statistically distinguishable from zero one month prior to the election. The campaigns officially begin with the dissolution of Parliament, which is about one month and a half prior to the election. Given this, it is possible that the estimate of a minority win one month before election is an anticipatory reaction from the media to minorities winning a seat in Parliament, as the media is more informed than the public. It is also possible that, with the objective of affecting the election results, the media responds to minority candidates that are more likely to win with a more negative coverage of their ethnic communities. This placebo test increases our confidence about the robustness of our results. It suggests that the estimates of a minority win on media tone are explained by the election and not by other dynamics in constituencies where minorities win.

We validate the identifying assumptions of the RD design by finding no sorting at the threshold where minorities win political office. First, the tests in Appendix J.3 show that the density of candidates is continuous at the victory threshold. Secondly, the tests in Appendix J.4 show that the constituencies and candidates where candidates narrowly win do not differ in observable ways from the constituencies and candidates where they narrowly lose. In addition, in Appendix J.5 we confirm that the results are neither sensitive to the choice of bandwidth, nor to the choice of order of polynomial. Finally, in Appendix J.6, we show that the minority victory effects on media tone are not driven by the political affiliation of a candidate. Overall, these tests strengthen the validity of our results on media tone.

#### 6.3.2 Additional analysis of media tone and salience

We first assess whether a minority win brings more media attention to a winning candidate's migrant ethnic group. An increased salience in an electoral context is of particular importance: more attention to ethnic minority communities promotes their visibility among politicians, organizations and larger society, improving those communities' ability to introduce claims (Bloemraad, de Graauw and Hamlin, 2015). However, a salient rhetoric with a negative tone about migrants can also increase mass public exclusionary attitudes (Hopkins, 2011), hindering migrants' integration. Thinking about threat concerns that arise from a minority win (related to economic considerations and social status), we then assess whether the response in negative rhetoric is stronger among segments predisposed to react to such concerns. Here we focus on right-wing media, which arguably is more threatened by economic redistribution and multiculturalism.

In Figure 4a we assess whether there is more media mentions about narrowly winners' than about narrowly losers' ethnic communities . The RD estimates of the effects of a minority win on the monthly number of mentions about a candidate's ethnic group suggest that in general there is more speech about the narrowly winner's ethnic group. Three months after the election, there is 20 more mentions about narrowly winners than losers, and such a difference is statistically significant at the 10% level. However, such an increase in media attention is concentrated on speech with specific valence. We find statistically significant increases in the proportion of negative and positive mentions (equivalent to 0.66 and 0.47 standard deviations, respectively three months after the election), but not in neutral mentions (of 0.09 standard deviations and not statistically significant, Figure 4b). Furthermore, at least during the first four months from the election, the increase in attention is predominantly negative, when we compare the share of negative to neutral mentions (Appendix Table K.1).



Figure 4: Ethnic minority victory effects on media attention and tone

Notes: Points are RD estimates of the effect of an ethnic minority victory and lines 95% robust bias-corrected confidence intervals.

Overall, we find a backlash from the news media to minority immigrants winning a seat in Parliament. Such backlash may further affect public attitudes and behavior in the constituencies that elect minorities. However, we also find a counter-backlash —the proportion of positive mentions about narrowly winners' ethnic communities also increase— that may counteract the force of a salient negative rhetoric. Perhaps surprisingly, while we find that newspapers that are not ideologically aligned with the candidate's party drive the negative mentions, we also find that these newspapers contribute with the positive mentions. However, we also find that left-wing newspapers and large papers (those with a circulation of more than 25,000 copies) contribute the most to the observed increase in positive mentions. In contrast, the increase in negative mentions is mostly driven by right-wing newspapers and papers of smaller circulation (Appendix K), suggesting that the negative response comes from elites that favor less redistribution, compensatory policies, and pluralistic values. These findings also suggest that the corrective behavior comes mostly from left-wing journalists working for bigger papers.

# 7 Discussion

We argue that dominant-group natives respond with hostility to threats triggered by ethnic minority electoral victories. Consistent with this argument, the victory effects on hostility against immigrant-minorities are stronger when (predetermined) local conditions or candidates' characteristics reinforce such threats. The hostile response from the public is specific to constituencies with a large migrant arrival (right side of Figure H.2a), where both concerns about access to resources and (national or cultural) identity concerns are heightened. The response is stronger when the candidate has a Muslim background (Figure H.1), intensifying identity threats, particularly to 'British life', and the response is specific to a candidate's political affiliation with the left (Figure H.2b), increasing both redistributive and identity threats. Similarly, the hostile response from elites is stronger among members of the right wing (Figure K.1b), who hold less favorable attitudes towards redistribution, and more concerns about identity.

Our study sharpens a debate about why electoral victories by ethnic minorities trigger a hostile response. One possibility is that independent of their parliamentary and constituency work, minority winning candidates increase the salience of minorities' upward mobility, reminding members of the dominant group of their changing ethnic demographic landscape. Craig, Rucker and Richeson (2018) argue that such priming in and of itself can trigger concerns about dominant groups' social standing. As such, a minority win plays a role of an information shock that redirects dominant-group members' attention to threatening contextual conditions, triggering in turn a hostile reaction. Such a hostile reaction is expected to be stronger where the information confirms changes people observe in their environment (e.g., a large migrant arrival, right side of Figure H.2a), when the information is novel (e.g when a minority wins a constituency for the first time, Figure H.2c), and when the information is recent (readily after the election, Figures 1b and 3b). Our findings point towards this possibility: a close electoral victory plays an informational role about the status, power and mobilization capacity of minority groups.

However, our findings also suggest that people update threat concerns as more information becomes available. Particularly, we found that 1) the effects weakly decay over time (Figures 1b and 3b) and 2) that they are concentrated in constituencies with no prior experience of a minority victory (Figure H.2c). These suggest that once members of the dominant group realize that minority office-holding does not involve ingroup favoritism (in distributing finite resources or support for redistributive or compensatory policies), as documented in some existing work (e.g Bhalotra et al., 2014), hostility from dominant group members subsides.

Together with the finding that victory effects are not moderated by local economic conditions (left side of FigureH.2a), our results also allow making some *suggestive* head ways about the dimensions of threat that are most relevant to cases of hostile responses to the political success of a minority group. While it is notoriously hard to separate threats based on social-structural sources of group difference (i.e. *objective material threats*) from threats based on group categorization and differentiation (i.e. *subjective status threats*) (Manekin, Grossman and Mitts, 2019), this set of three findings point to the primacy of the subjective status dimension of group threat, at least in our setting.<sup>22</sup> To be clear, this is not to say that objective material considerations are not important, but only that our set of findings is more consistent

<sup>&</sup>lt;sup>22</sup>This is reminiscent of the argument that the white nationalist backlash that followed president Obama's victory (and which was instrumental in the rise of president Trump) was to the most part a response to a symbolic threat to the dominant status of white people, as opposed to material concerns over specific policies Obama may have championed as president (Hopkins, 2021).

with non-material considerations. Future work should help clarify which dimension of group threat—subjective threat to group status or objective-material threat—is most consequential in this and other incidences of minority's political power.

Finally, consistent with theories pointing to elite mobilization fueling communal grievances for their political benefit, our results do point to a backlash from elites and the mass public. However, exploring the patterns of influence between the media and the public in response to a minority win is outside the scope of this study. On one hand, the news media can shape the public's political attitudes (Munger et al., 2020), and electoral behavior (Grossman, Margalit and Mitts, 2022). On the other hand, due to market pressures, media outlets are incentivized to cover issues that resonate with their audiences' priorities (Gentzkow and Shapiro, 2010). In addition, public sentiment is often reflected by newsworthy political events in themselves, like election results (Todd, 1980). Our study is not designed to contribute to the enduring debate of whether the elites through the media influence or reflect mass public opinion (DellaVigna and Gentzkow, 2010). Nevertheless, the magnitude of the RD estimates of the effect of a minority win suggests no clear pattern of influence of one societal sector on the other, as they are both about the same size (0.65 sd). It is left to future work, based on a different research design, to assess possible co-influence patterns.

# 8 Conclusion

Using a regression discontinuity design of close parliamentary elections in the UK, we identify the effects of immigrant-origin minority candidates winning political office on the attitudes and behavior of dominant-group members. We find that such victories result in an increase in hate crimes, in exclusionary attitudes towards immigrants as captured by mass public opinion, and in negative tone in the coverage of a winning candidate's ethnic group in both local and national newspapers.

An ethnic minority candidate winning a seat in the national parliament triggers a hostile reaction because it poses a threat to the position of dominant group members. The backlash we identify in response to an election outcome is especially concerning because it is so widespread, encompassing not only a violent-prone extremist fringe, but also the mass public, and elites. This finding contributes to the intergroup conflict literature, which has been somewhat ambiguous with respect to the identity of those among the majority group most likely to respond with hostility to heightened outgroup threat. In addition, our study's findings raise important questions regarding both the role of competitive elections in intergroup threat theory and the nature of threat that causes a hostile response. While the structure of our data prevents us from addressing all these questions conclusively, they do point to important avenues for future work.

From a normative perspective, it is somewhat reassuring that we found that the backlash against minority communities is *temporal*. Given the effects' temporality, perhaps on balance, the positive outcomes from getting immigrant-origin minorities elected outweigh the negative effects of such backlash dynamics. Future research should address such a question, as well as the policies that can counteract the hostile response to immigrants' successful integration.

The RD effects we estimate are representative of constituencies where ethnic minority candidates stand for Parliament, which are distinct from the average constituency in dimensions related to immigrant demographics and their settlement choices (Table F.1). Moreover, the RD effects are identified at the victory threshold, where elections between dominant-group and ethnic minority candidates are the most competitive. Our RD design is therefore consistent with our theoretical expectations that threats posed by a minority victory are heightened in a close election. However, from an external validity perspective, it is unclear whether we would observe the same (magnitude of) effects in non-close election contexts. It is left to future work (using a different research design) to investigate such a question. However, it is reasonable to predict that the backlash dynamics we document here possibly do generalize to other multicultural rich democracies with first-past-the-post electoral systems, and where the majority ethnic group is also the dominant group. We hope that our single-country study motivates future research in other contexts.

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# Appendices —For Online Publication—

# A Table of summary statistics

In Table A.1 we present summary statistics for our main outcomes, treatment, and predetermined covariates, including characteristics of the candidates and constituencies.

# B Assignment of hate crimes from LADs into parliamentary constituencies

Local Authority Districts are a level of subnational division used for the purposes of *local* government. As such, district boundaries may include more than one parliamentary constituency, and constituencies may cross district boundaries. On average, districts contain 2 constituencies (78% include more than one) and about 30% of the constituencies cross district boundaries.

In order to compute hate crime rates at the constituency level we assign the LAD crime rate per 1,000 population to each constituency within a LAD, and for constituencies which cross LAD borders, we assign the average LAD crime rate weighted by population overlap, using the wards' population within a constituency and district to compute the weight. When a ward crosses constituency boundaries (251 wards out of 8297), we split the population ward proportionally by the constituency size.

#### B.1 Validation of assignment of hate crimes from LADs

To validate the measure of hate crime at the constituency level, we use the assignment rule described above to infer the share of the ethnic minority population at the constituency level and we compare it with the observed share. Figure B.1 shows that the inferred and observed shares are strongly correlated, rendering validity to the assignment rule of hate crimes from districts into constituencies.



(a) Ethnic minority population (b) Population with a non-dominant religion

Figure B.1: Validity of hate crime assignment from LAD to constituency

variable	mean	sd	min	may
% negative mentions	0.30	0.31	0.00	1 00
% neutral mentions	0.00	0.22	0.00	1.00
% positive mentions	0.10	0.22	0.00	1.00
inclusionary attitudes	0.21 0.35	0.20 0.48	0.00	1.00
hate crime rate	0.00	0.10	0.00	0.90
victory margin	-20.04	37.91	-82.05	70.17
winner	0.20	0.45	0.00	1 00
incumbent candidate	0.23	0.40	0.00	1.00
female candidate	0.21 0.37	0.41	0.00	1.00
left party candidate	0.57 0.57	0.40	0.00	1.00
% ethnic minority	23.66	20.18	1.00	76.90
% non-dominant religion	20.00	0.17	0.00	0.91
population density	35.51	34.09	0.00	146 40
% voung	0.22	0.06	0.13	0.46
% single	37 66	9.68	2310	65 10
% deprivation level 1	0.33	0.00	0.28	0.38
% deprivation level 2	0.00	0.04	0.10	0.31
% deprivation level 3	0.06	0.02	0.02	0.13
% deprivation level 4	0.01	0.00	0.00	0.02
% social grade ab	0.24	0.09	0.08	0.50
% social gradea c1	0.31	0.03	0.22	0.43
% social grade c2	0.19	0.05	0.06	0.32
% social grade de	0.26	0.08	0.09	0.51
% level 1 qualifications	12.76	2.72	5.70	19.20
% level 2 qualifications	14.22	2.73	7.30	18.40
% level 3 qualifications	12.02	2.65	8.30	27.70
% level 4+ qualifications	29.30	9.91	12.10	57.40
% economically inactive	30.05	4.33	19.20	43.00
% economically active: students	3.79	1.73	1.90	12.50
% economically active: employed	61.37	6.30	42.00	74.60
% economically active: unemployed	4.79	1.55	2.20	9.50
% tenure: rent free	1.35	0.42	0.60	4.00
% tenure: owned	58.84	14.26	20.50	85.50
% tenure: private rented	19.10	7.77	7.30	42.10
% tenure: social rented	19.81	8.83	5.30	50.60
% English main language: none	7.20	6.52	0.30	26.40
% English main language: one $>16$	6.15	4.97	0.50	20.90
% English main language: one $<16$	1.39	1.36	0.00	6.10
% immigrants: EU	4.90	3.55	0.60	16.90
% immigrants: non-EU	14.39	11.55	1.00	47.40
% immigrant arrival < 1960	0.01	0.01	0.00	0.04
% immigrant arrival 1960-1990	0.05	0.04	0.01	0.19
% immigrant arrival 1990-2011	0.14	0.11	0.01	0.42
% vote far-right	0.05	0.03	0.00	0.18

Table A.1: Summary statistics

# C Survey items used in measurement of public opinion

#### Main outcome:

**Inclusionary attitudes towards immigrants.** Measured with the item *Do you think that too many immigrants have been let into this country, or not?* on a binary scale with categories *Yes, too many, and No, not too many.* This item is available and with a fixed wording in the last three post-election surveys.

#### Additional outcomes:

Attitudes towards immigrants/immigration regarding the economy. Measured in 2010 with the item Immigrants generally are good for Britain's economy. on a 5-point Likert scale ranging from Strongly disagree to Strongly agree. In the other three election years, the framing of this question is about immigration as opposed to immigrants. The wording of the answers and their range is also different. Nevertheless, we pool the answers to these two questions, as we consider that they are close enough in meaning. We do so to have at least one attitudinal item about immigrants spanning the four election years. The question is: Do you think immigration is good or bad for Britain's economy? on a 7-point Likert scale ranging from Bad for economy to Good for economy. To have all answers on a 5-point scale, we collapse the answer categories 2, 3 and 5, 6.

Index of stereotypical beliefs about migrants and attitudes towards diversity accommodation. Computed by summing the responses to the following items: Now thinking about minorities in Britain. To what extent do you agree or disagree with each of the following statements?

- 1 Minorities should adapt to customs and traditions of Britain
- 2 Will of the majority should prevail, even over the rights of minorities
- 3 Immigrants are generally good for Britain's economy
- 4 Britain's culture is generally harmed by immigrants
- 5 Immigrants increase crime rates in Britain

Responses are on a 5-point Likert scale ranging from *Strongly agree* to *Strongly disagree*. The order of item 3 is reversed to compute the index. All items are positively correlated with a Cronbach's alpha of 0.83. These items are only available for the 2017, 2019 post-election surveys, and only for respondents who self-completed an additional module (about 60% of all respondents).

#### Placebo outcomes:

*Index of left-right views*. Computed via simple sum of these 8 items: *How much do you agree or disagree with the following statements?* 

- 1 Ordinary working people get their fair share of the nation's wealth.
- 2 There is one law for the rich and one for the poor.
- 3 There is no need for strong trade unions to protect employees' working conditions and wages.
- 4 Private enterprise is the best way to solve Britain's economic problems.
- 5 Major public services and industries ought to be in state ownership.
- 6 It is the government's responsibility to provide a job for everyone who wants one.
- 7 People should be allowed to organise public meetings to protest against the government.

8 People in Britain should be more tolerant of those who lead unconventional lives.

Responses are on a 5-point Likert scale ranging from *Strongly disagree* to *Strongly agree*. The order of items 2, 5, 6, 7 and 8 are reversed to compute the left–right index. This index has a Cronbach's alpha of 0.62, and all items are positively correlated.

# D Newspaper data, computation of media tone measures and validation of key elements

**Newspaper data** We construct the dataset of newspaper articles using the following steps. To determine a comprehensive list of UK newspapers, we first identified a list of seed categories on Wikipedia (WP) (e.g. 'Category:Newspapers\_published\_in\_England'), we took the recursive items of those categories (e.g. 'Category:Newspapers\_published\_in\_England' > 'Category:Newspapers\_published\_in\_London'), we used WP article properties to filter out articles about non-newspapers (e.g. people, books), and we extracted the newspaper URLs from the WP Infobox using the Python package wptools. With this process we identified a list of UK newspapers URLs containing 337 newspapers in total.

Then, to obtain the articles published by each of these newspapers, we looked up the URLs in Common Crawl (an open repository of web crawl data containing a snapshot of every web page at the moment of the crawl). Particularly in the Index for 2020-16 crawl, the most recent crawl at that moment. We retrieved the WARC (Web ARChive format) records for each crawled page from the newspaper, and extracted the pages' HTML. From the HTML, we extracted the text, title, and byline using the Python package readabiliPy; the publication date using the Python library htmldate; the location by tokenizing the article with CoreNLP, and looking for tokens which match place names in the Index of Place Names in Great Britain, and mapping to the corresponding constituency. Figure D.1 presents the geographical coverage of all extracted articles across constituencies.

In order to select the subset of articles that reference a candidate's ethnic group, we extracted mentions of terms referring to nationalities and countries using the CoreNLP named entity annotator, as well as the sentiment of the sentences mentioning those terms, using CoreNLP's five-category sentiment classifier, in order to define the tone of speech about a candidate's ethnic group. This sentiment classifier addresses compositionality in semantic vector spaces allowing to detect intricacies of sentiment and to capture complex linguistic phenomena, like sentiment change and scope of negation (Socher et al., 2013). The classifier provides highly accurate sentiment predictions at the sentence level. We focus on the sentiment of each sentence containing a mention of relevant country or nationality terms. Therefore, an article may provide more than one instance of speech (or mention) about a candidate's ethnic group. The median article contains 2 mentions of the same term. We focus on the collection of all of these instances of speech for each candidate.

Our sample of articles includes for the most part references to a candidate's ethnic group, as opposed to references to a candidate. The share of articles with mentions of a candidate is low, of only 0.53%, and this share is possibly an overestimate. To compute the share of articles with mentions of a candidate, we extract a candidate's surname from the sample of news articles used in the analysis. Because names can be written differently in different outlets, we use approximate string matching with a similarity score greater than 0.5 to extract mentions of a candidate. Given that we are only extracting a candidate's surname as opposed to their full name, it is possible that we are overestimating the share of articles referencing a candidate, and yet this share is low, suggesting that our analysis captures mostly responses against a candidate's ethnic group.



Figure D.1: Coverage of all extracted articles

Validation of named entities and their sentiment classification A human judge annotated a sample of 102 articles containing 563 mentions of country/nationality terms in order to validate them and their sentiment classification. Specifically, the human judge first annotated whether the terms refer to a country/nationality or not for each mention in the article. Only 7% of the mentions refer to something else (e.g. the name of a person, a telephone *pole* as opposed to a Polish person, or were used in URLs referred in the articles). In other words, for this task the named entity annotator of CoreNLP had 93% accuracy.

Second, the human judge annotated the sentiment of each article's sentence mentioning a country/nationality term in the five-category classification scale. Comparing the human annotations to the classification of the model for the positive (including 'very positive' and 'positive') and negative ('very negative' and 'negative') categories, and defining the positive class as the negative sentiment category, we have that the CoreNLP's sentiment annotator has an accuracy of 78%, precision of 63%, recall (or true positive rate) of 89%, specificity (or true negative rate) of 72%, and F1-score (or harmonic mean of precision and recall) of 74%. These are reasonable statistics for sentiment classification (Socher et al., 2013). Although the model overpredicts the negative mentions as compared to the human annotations (the precision is 63%), it gives us a reasonable, if imperfect, measure of negative speech about a candidate's ethnic group in the newspaper articles. Moreover, the effect estimates are not expected to be affected by the imprecision of the sentiment classification model (although the variance estimates may be affected), given that the model overpredicts negative mentions equally across articles speaking about the ethnic group of a narrowly winner and articles speaking of the ethnic group of a narrowly loser.

Measure of media tone about migrant groups We match the country/nationality mentions' sentiment to candidates based on date, location, and country/nationality. Specifically, we follow this process: 1) we map the candidate's origin characteristics (their country/nationality of origin, and their parents' and grandparents' countries/nationalities) to a sub-region, 2) we map the articles' country/nationality mentions to a sub-region and 3) we match candidates and articles based on sub-region, constituency and date of publication (using only the subset of articles published on election day and up to 10 months after the election, which corresponds with the maximum number of months between the 2019 election and the most recent news article. This mapping process implies that for say a candidate of Indian origin, the measure of speech about her ethnic group accounts for mentions in her constituency of all countries/nationalities within Southern Asia. In general, we account for all known countries/nationalities of origin of a candidate. For instance, for a Ugandan-Indian candidate,<sup>23</sup> we include all articles which mention the terms Uganda/Ugandans and India/Indians. In this case, given our mapping process the measure of speech about her ethnic group includes all mentions of Southern Asia and Eastern African. Overall, only 11 candidates are assigned to more than one sub-region, but not to more than two. Furthermore, this process excludes a) candidates for whom we do not have origin information below their continent of origin for example, Asia, Africa, Caribbean and b) articles with mentions of terms like 'asian', 'african'. The proportion of excluded candidates represents 30% of all strongest minority candidates (winners and first minority losers). While it is a large proportion, their exclusion may be positive in two ways: 1) the salience or online presence of included candidates is kept constant across candidates, given that we are excluding candidates for whom we cannot find information online about their background and 2) the mapping process treats every candidate the same without making assumptions about their origin. Out of all the strongest minority candidates across the four general elections for whom we have specific information about their background, we have at least one mention during the first ten months after election for 438 candidates in England and Wales. The median candidate has 71 mentions.

Following this matching process, we then compute the ratio between the number of negative mentions (adding together the 'very negative' and 'negative' sentiment categories) and the total number of mentions about the candidates' sub-region of origin in their constituency, at every month after the general election. We compute the analogous ratios for positive (summing the 'very positive and 'positive' categories) and neutral mentions. Figure D.2 presents the frequency of sub-region mentions for all matched candidates across the last four general elections (left panel) and the distribution of mentions about the candidate's sub-region by sentiment categories (right panel).

<sup>&</sup>lt;sup>23</sup>These cases are mostly Ugandan-born candidates with Indian parents who migrated to the UK during the onset of Idi Amin's coup in the 70s.



(a) Distribution of all mentions by sub-region



50-

75-

100-

Notes: In (a) the orange numbers indicate the number of candidates from each sub-region. In (b) the dashed vertical lines indicate the median candidate's number of mentions. The histogram excludes the top quartile of candidates with the most mentions for visualization purposes.



#### $\mathbf{E}$ Ethnic minority candidates across time, parties, and geography



(a) Number of ethnic minority (b) Strongest ethnic minority (c) Geographical coverage of candidates contesting a seat in candidates by political party ethnic minority candidates Parliament

Notes: (b) Includes only the strongest minority candidate by constituency-election.

Figure E.1: Description of ethnic minority candidates

# **F** Selection of constituencies into the sample

	All cons	All constituencies		Sample constituencies		
variable	mean	$\operatorname{sd}$	mean	sd		
share ethnic minority	12.786	15.390	23.361	20.174		
share non-dominant religion	0.081	0.123	0.158	0.174		
population density	21.280	26.334	34.301	33.481		
share young	0.197	0.050	0.215	0.055		
share single	34.098	8.242	37.276	9.528		
share deprivation level 1	0.326	0.018	0.330	0.020		
share deprivation level 2	0.194	0.041	0.197	0.043		
share deprivation level 3	0.052	0.022	0.057	0.023		
share deprivation level 4	0.005	0.003	0.006	0.004		
share social grade ab	0.224	0.083	0.233	0.092		
share social gradea c1	0.307	0.032	0.311	0.032		
share social grade c2	0.212	0.044	0.195	0.047		
share social grade de	0.257	0.077	0.261	0.084		
share level 1 qualifications	13.388	2.267	12.919	2.692		
share level 2 qualifications	15.390	2.203	14.387	2.715		
share level 3 qualifications	12.321	2.411	12.001	2.514		
share level 4+ qualifications	26.824	8.355	28.657	9.783		
share economically inactive	30.419	3.950	30.169	4.312		
share economically active: students	3.334	1.525	3.739	1.683		
share economically active: employed	61.912	5.443	61.296	6.261		
share economically active: unemployed	4.336	1.428	4.795	1.526		
share tenure: rent free	1.352	0.398	1.352	0.412		
share tenure: owned	64.278	11.563	59.347	14.133		
share tenure: private rented	16.281	6.354	18.785	7.575		
share tenure: social rented	17.354	7.489	19.626	8.807		
share English main language: none	4.034	4.871	7.050	6.453		
share English main language: one $> 16$	3.553	3.759	6.066	4.970		
share English main language: one $< 16$	0.736	0.989	1.370	1.343		
share immigrants: EU	3.404	2.771	4.737	3.506		
share immigrants: non-EU	8.258	8.878	14.074	11.473		
share immigrant arrival $< 1960$	0.009	0.005	0.012	0.006		
share immigrant arrival 1960-1990	0.032	0.031	0.053	0.041		
share immigrant arrival 1990-2011	0.082	0.084	0.133	0.107		
share vote far-right 2010	0.056	0.029	0.050	0.032		
N constituency-election	2	292		662		

Table F.1: Selection of constituencies into the sample

Notes: shows descriptive statistics for all constituencies, and constituencies in our sample. Our sample is selected by dropping constituencies where ethnic minority candidates do not stand for Parliament. The unit of observation is a constituency-election year.

## G Minority victory effects on hate crimes

In this section we report a set of placebo and falsification tests that establish the validity of the RD design (sections G.1–G.5), the main RD results in tabular form (section G.7), a comparison between the main RD results and the results when we control for party dummies (section G.6, a descriptive test confirming that the minority victory effects are not driven by a crime decay in constituencies with minority close defeats (section G.8, and the robustness of the RD to an alternative, difference-in-differences specification (section G.9).

#### G.1 Continuity of placebo outcomes

We use as a placebo outcome the constituency crime rate for equivalent crimes that are not motivated by racial or religious animus. We test whether this placebo outcome is discontinuous at the margin of victory cutoff. The rationale for this test is the same as the rationale for a test assessing discontinuities in predetermined covariates: when a placebo outcome that correlates strongly with the outcome of interest is discontinuous at the cutoff, then the continuity of the potential outcome functions is unlikely to hold, questioning the validity of the RD design under the continuity-based approach.

Figure G.1 shows that this placebo outcome is not discontinuous at the threshold where an ethnic minority candidate wins a seat in Parliament. The effects are not statistically significant, have the opposite direction to the effects on hate crime and are comparably smaller (Figure G.1c). This increases our confidence that the validity of the design holds, and that the estimates of the minority victory effects on hate crime are not explained by a generalized higher level of crime in constituencies where minorities win.



(a) 3 months after general elec- (b) 1–9 months after general (c) Comparison of main and tion election placebo effects

Notes: In (a) lines represent the average monthly crime rate (with 95% confidence intervals) from local linear regression with covariate adjustment fitted to the sample of units whose vote-share winning margin is within the MSE-optimal bandwidth of +/- 14.5 percentage points around the victory threshold. Points are the average monthly crime rate for equally spaced mimicking-variance bins. In (b) and (c) points are RD estimates of the effect of an ethnic minority victory and lines 95% robust bias-corrected confidence intervals.

Figure G.1: Ethnic minority victory effects on equivalent crimes

#### G.2 Continuity of main outcome before general election

We test whether the hate crime rate is discontinuous at the margin of victory cutoff before the general election. Figure G.2 shows that the hate crime rate is not discontinuous at the threshold where an ethnic minority candidate wins a seat in Parliament. The effects are not statistically significant and are comparably smaller to the effects after the election. This increases our confidence about the robustness of our results, as it suggests that the estimates of the minority victory effects on hate crime are not explained by other dynamics in constituencies where minorities win.



Notes: Points are RD estimates of the effect of an ethnic minority victory and lines 95% robust bias-corrected confidence intervals.

Figure G.2: Ethnic minority victory effects on hate crimes before and after the election

#### G.3 Density of the running variable

Following (Cattaneo, Jansson and Ma, 2020), we test (using the rddensity R package) the continuity assumption of the density functions of the running variable with local polynomial density estimators. Figure G.3 reveals no evidence of sorting around the cutoff. Even though there is a jump in the density functions for losing and winning candidates at the cutoff, the confidence intervals of these functions completely overlap and the p-value of the continuity test indicates that we cannot reject the null of continuity of the density functions. The results of this test indicate no manipulation of the election results.



Notes: Tests for manipulation of the election results by assessing continuity of the candidate density functions at the cutoff with local polynomial density estimators and robust bias-corrected inference.

Figure G.3: Continuity in the density of candidates around the cutoff

#### G.4 Continuity of predetermined variables

Following (Calonico, Cattaneo and Titiunik, 2014), we also test (using the **rdrobust** package in R) the continuity assumption for predetermined variables with local linear regression within an MSE-optimal bandwidth. Given that we have a large number of covariates, we show in Figure G.4a the threshold for the p-values of the tests of discontinuity (the dashed vertical line), when controlling the false discovery rate with the Benjamini–Hochberg procedure.<sup>24</sup> In this case, 3 of a total of 37 covariates show statistically significant discontinuities after controlling the FDR.

However, some of the covariates we include are not independent of each other (as BH correction would assume); in particular some of the covariates (such as the proportions of immigrant arrivals in different decades) are linear combinations of an underlying variable. To account for this dependence, we test the continuity assumption with a permutation test for continuity in the distribution of observations around the cutoff (which is a stronger requirement than continuity of means) as described in (Canay and Kamat, 2018) and as implemented by the **RATest** R package. Here we find that only 4 of the 37 predetermined variables are discontinuous at the cutoff (Figure G.4b). This number of discontinuous covariates is equivalent to two more than the average number of false rejections (which is 2). Furthermore, when controlling for the FDR with the Benjamini-Hochberg procedure, we do not find any discontinuous variables.

Given the results from both the permutation test for continuity of distribution around the cutoff and the FDR-corrected local linear regression test, the distribution of p-values is consistent with the uniform distribution that we would expect for balance checks in a randomized experiment. This indicates that there were no systematic discontinuities at the threshold where minorities become MPs, and that therefore the continuity assumption of the potential outcome functions is likely to hold.

<sup>24</sup>See (De la Cuesta and Imai, 2016) for an example of controlling the false discovery rate with the Benjamini–Hochberg procedure when testing for multiple discontinuities in predetermined variables in RD contexts of close elections.



(a) Continuity of means using local linear regression

(b) Continuity of distribution using asymptotic permutation test

Notes: Test for continuity of candidate and constituency predetermined background characteristics in (a) using a local linear regression with a symmetric MSE-optimal bandwidth as implemented by the **rdrobust** R package and in (b) using an asymptotic permutation test comparing the distribution of observation near the cutoff as implemented by the **RATest** R package. The vertical line in (a) indicates a *p*-value = 0.004, which is the threshold for the p-values when controlling the false discovery rate with the Benjamini–Hochberg procedure, and in (b) a *p*-value = 0.05. Here the threshold for p-values when controlling the FDR with BH procedure is approximately 0.

Figure G.4: Continuity of predetermined variables around the victory threshold

#### G.5 Sensitivity to the choice of bandwidth and order of polynomials

In Figure G.5a we test for sensitivity of the results to the choice of bandwidth, using CER- and MSE-optimal bandwidths, half and one and a half times their size. We find that the results are broadly consistent with the findings obtained with the optimal MSE bandwidth.

In our main estimation method we compute the RD estimates by fitting local-linear polynomials to avoid noisy estimates with poor coverage of confidence intervals (Gelman and Imbens, 2019). We show nevertheless, in Figure G.5b, that the results are robust to fitting quadratic polynomials.



Notes: (a) tests for sensitivity to the choice of bandwidth. MSE stands for mean squared error optimal bandwidth and CER refers to a bandwidth that minimizes the coverage error from the robust biased corrected confidence intervals obtained with the MSE-optimal bandwidth. The values next to the 'CER', 'MSE' labels indicate the bandwidth size. (b) tests for sensitivity to the choice of polynomial order by comparing estimates with local-linear and quadratic polynomials.



### G.6 Controlling for candidate's political party

We isolate the ethnic identity of candidates from their political party affiliation from the hate crime response by controlling for party dummies. In Figure G.6 we compare the RD estimates of our main specification to the estimates from a specification controlling for party dummies. The coefficients are very close in magnitude, suggesting that the violent response is not explained only by the political affiliation of the candidates.



Figure G.6: Isolating the ethnic identity of candidates from their political party

Notes: Points are RD estimates of the effect of an ethnic minority victory on hate crimes per 1000 residents and lines 95% robust bias-corrected confidence intervals.

#### G.7 Main RD results in tabular form

RD	se	p-	95%	mean	sd	MSE-	eff.	Ν	controls	month
estimate		value	$\operatorname{CI}$	$\operatorname{control}$	effect	opt bw	Ν			
0.076	0.066	0.212	[-0.054, 0.244]	0.107	0.911	20.59	192	1040	no	1
0.070	0.045	0.070	[-0.007, 0.189]	0.107	0.853	21.23	198	1040	yes	1
0.076	0.059	0.162	[-0.038, 0.228]	0.108	1.012	18.98	273	1560	no	2
0.070	0.039	0.043	[0.003, 0.174]	0.110	0.868	20.41	285	1560	yes	2
0.076	0.054	0.135	[-0.029, 0.217]	0.104	1.010	19.14	364	2080	no	3
0.070	0.037	0.038	[0.005, 0.165]	0.103	0.882	22.29	416	2080	yes	3
0.083	0.057	0.122	[-0.027, 0.231]	0.098	1.135	18.69	450	2600	no	4
0.076	0.038	0.026	[0.011, 0.176]	0.100	0.966	20.73	480	2600	yes	4
0.076	0.053	0.136	[-0.029, 0.214]	0.099	1.053	18.81	546	3120	no	5
0.068	0.035	0.034	[0.006, 0.161]	0.099	0.884	21.90	618	3120	yes	5
0.071	0.051	0.140	[-0.029, 0.203]	0.102	0.963	19.32	644	3640	no	6
0.035	0.030	0.238	[-0.029, 0.118]	0.104	0.484	31.87	1113	3640	yes	6
0.068	0.050	0.151	[-0.031, 0.199]	0.105	0.878	19.26	736	4160	no	7
0.033	0.030	0.254	[-0.031, 0.116]	0.108	0.443	31.81	1272	4160	yes	7
0.067	0.049	0.142	[-0.028, 0.193]	0.104	0.857	19.24	828	4680	no	8
0.034	0.029	0.230	[-0.027, 0.114]	0.108	0.455	31.52	1413	4680	yes	8
0.062	0.046	0.149	[-0.028, 0.182]	0.105	0.801	19.79	930	5200	no	9
0.062	0.031	0.027	[0.008, 0.144]	0.104	0.750	21.21	990	5200	yes	9

Table G.1: Ethnic minority victory effects on hate crimes

Notes: The dependent variable is monthly hate crimes per 1000 residents in a constituency. RD estimate is computed with local-linear regression within a symmetric MSE-optimal bandwidth. se is the conventional standard error, *p*-value and 95% CI are robust bias-corrected. *mean control* indicates the average monthly hate crime rate in constituencies where ethnic minorities barely lose, *sd effect* presents the RD estimate in standard deviations, MSE-opt bw is the MSE-optimal bandwidth of vote-share winning margin around the victory threshold, *eff.* N is the sample size within the MSE-optimal bandwidth and N is the sample size. *controls* include an indicator of whether the candidate is the incumbent, constituency vote share for UKIP and BNP in the previous election, constituency share that is ethnic minority, young population, single, with social grade DE, unemployed, population density, and share of households with 3 or more deprivations, and in social tenure. Standard errors are clustered by constituency-election. Hate crime data are from Home Office, ethnic background of candidates is constructed by the authors, and constituency characteristics from 2011 UK Decennial Census.

### G.8 Assessing a hate crime decay in minority barely lost constituencies

In Figure G.7 we descriptively show that the minority victory effects on hate crime are not driven by a crime decay in constituencies with close minority defeats. The average hate crime rate in these constituencies after the election is very close to the average hate crime rate before the election. If anything, hate crimes are on average slightly increasing in these constituencies after the election rather than decreasing. This suggests that the documented effect on hate crime is a backlash to minority victories, rather than sympathy towards minorities in constituencies narrowly won by dominant-group candidates.



Figure G.7: No hate crime decay in minority barely lost constituencies

Notes: Points are monthly average hate crimes per 1000 residents in constituencies barely lost by ethnic minority candidates, and horizontal lines pre- and post-election hate crime averages in those constituencies.

#### G.9 Difference-in-differences

As an additional check for the estimated effects on hate crime, we use a difference-in-differences (DiD) approach that compares the hate crime rate across constituencies that elect ethnic minority candidates and constituencies that do not, before and up to nine months after the election when a minority candidate is elected for the first time in a constituency.

With this estimation design, a constituency is in the treatment condition during the months following a general election in which an ethnic minority candidate is elected, and in the control condition, otherwise. 69 out of 520 constituencies have an ethnic minority MP during at least one month between April 2014 and September 2020, 23 constituencies have a minority MP during this whole period, and 4 constituencies go in and out of the treatment condition. We focus on the first nine months after the election—the maximum number of months which are observable for constituencies electing an ethnic minority candidate for the first time in 2019.

We estimate the DiD estimator with the generalized synthetic control method based on interactive fixed effects models as described in (Xu, 2017) and implemented by the gsynth R package. We use this approach as opposed to a standard two-way fixed effects regression because even after controlling for relevant predetermined covariates that determine both minority victories and hate crimes, we reject the null hypothesis of common trends for all pre-minority victory periods and all groups of constituencies that elect a minority candidate for the first time at a particular election. The Cramer von Mises test statistic and p-value of (Callaway, Sant'Anna et al., 2018)'s integrated moments test for the conditional parallel trends assumption holding in all pre-treatment time periods for all groups are 0.886 and  $0.\overline{0}$ , respectively.

Given this, we instead impute a counterfactual for each treated constituency that resembles the pre-minority victory hate crime trends of treated constituencies. Furthermore, we prefer the generalized synthetic control method over the most recently developed approaches for DiD with multiple time periods and variation in treatment timing (e.g. Callaway, Sant'Anna et al. (2018)), given that the number of constituencies electing a minority candidate for the first time at each of the three observed elections is small: 14, 9, 20, respectively. This produces group-time average treatment effects that are rather noisy. Figure G.8 presents the estimated effects of electing an ethnic minority candidate to Parliament on monthly hate crimes per 1000 residents. It shows a positive and significant effect in the first month after the election that is won by a minority candidate. After that month, each monthly effect is relatively smaller, and is not statistically significant. However, on average the effect remains positive and larger than the average effect before minority candidates win an election. Consistent with parallel trends (and with the method computing an adequate counterfactual), we do not see any pre-minority MP significant effects, and the effects are very close to zero throughout the 12 month period before an ethnic minority candidate wins the election.



Notes: The line represents the ATT, and the ribbon 95% confidence intervals.

Figure G.8: First time ethnic minority victory effects on hate crime

ATT.avg	S.E.	CI.lower	CI.upper	p.value	months
0.0153	0.0051	0.0045	0.0242	0.005	1
0.0088	0.0041	-0.0003	0.0160	0.058	2
0.0071	0.0038	-0.0010	0.0139	0.078	3
0.0046	0.0035	-0.0029	0.0106	0.268	4
0.0054	0.0035	-0.0025	0.0110	0.199	5
0.0048	0.0034	-0.0032	0.0104	0.287	6
0.0046	0.0034	-0.0035	0.0100	0.350	7
0.0060	0.0035	-0.0026	0.0112	0.199	8
0.0065	0.0036	-0.0026	0.0114	0.207	9

Notes: The dependent variable is monthly hate crimes (racially/religiously aggravated offenses) per 1,000 residents. Inference is conducted via boot-strapping. Standard errors are clustered by constituency.

Table G.2: Average first time ethnic minority victory effects on hate crime (averaging across months after victory)

Table G.2 presents the average effects across the first nine months after a minority victory. In

general, the average effects during this period are positive, statistically significant in the first three months, and decrease with time. Again, these patterns suggest a violent but rather short-lived reaction to ethnic minorities accession to political office.

While the effect at one month after a victory is equivalent to an increase of 1.5 hate crimes per 100,000 residents (and statistically significant at the 1% level), the average effect after three months of victory almost halves to 0.7 hat crimes per 100,000 residents (statistically significant at the 10%level). These effect is ten times smaller than the effect estimated with the RD design. On the one hand, because close elections between ethnic minority and dominant-group candidates are more likely to be perceived as posing a threat to the dominant group's status, and therefore to result in conflict, the RD estimates are likely capturing an upper-bound effect of ethnic minority victories on hostility against minority communities. To provide suggestive evidence that the difference between the magnitude of our RD and DiD estimates is in part explained by how close the election is, in Figure G.9 we compute DiD estimates for different values of victory margins. We start by including constituencies with elections won by a maximum of 22 percentage points, corresponding to the MSE-optimal bandwidth from the RD estimates. We then increase the sample until we include every constituency (that is, with elections won by a maximum of 100 percentage points, as shown in Table G.2). In general, as we increase the victory margin, the DiD estimates decay, suggesting that the degree to which the election is more or less competitive may explain, in part, the difference in the size of effect estimates across the two estimation methods.



Notes: Points represents the ATT and lines 95% bootstrapped confidence intervals.

Figure G.9: First time ethnic minority victory effects on hate crime by victory margin

On the other hand, the effects of the two estimation methods are not directly comparable as they are targeting different quantities of interest. The quantity of interest in the RD design is the local average treatment effect (LATE), while in the DiD approach is the average treatment effect on the treated (ATT). Moreover, the effective samples across the two different approaches are different: the DiD ATT includes the group of constituencies won by large margins and that on average have a smaller post-minority victory hate crime rate (of 0.10 per 1,000 people in constituencies won by more than 15 pp compared to 0.14 in constituencies won by less than 15 pp), while the RD LATE does not include such group of constituencies. Relatedly, the comparison group in the DiD includes constituencies where minority candidates lose by large margins or *do not even run* for Parliament, and that have on average higher post-election hate crime rates than constituencies where minority candidates run and lose by small margins. These differences in the composition of the samples can explain, in part, the difference in the size of effect estimates across the two estimation methods.

#### G.10 Testing for possible hate crime reporting bias

It is possible that the observed increase in hate crime is not only explained by the reaction of the dominant group to ethnic minorities winning elections, but also by an increase in hate crime reporting. Specifically, members of the ethnic group of the winning candidate may feel more empowered to report crime. While this is feasible, we contend that it is unlikely, as the definition of hate crime and the process to report it in the UK is designed to prevent under-reporting. Crimes are identified and flagged as a hate crime by the police and the Crown Prosecution Service when the criminal offense is *perceived* by the victim or any other person to be motivated by hostility or prejudice towards someone based on a personal characteristic like race or ethnicity,<sup>25</sup> religion or beliefs, without further prove.<sup>26</sup>

To further assess such an endogeneity concern we estimate minority win effects on hate crime within the category of 'violence against the person', and particularly 'violence with injury'. Because of the seriousness of the offense, such a category of hate crime is expected to be consistently reported regardless of whether people are empowered or discouraged to report crime. Accordingly, the RD estimates of the effects of a minority win should not suffer from such a reporting bias. Despite the small number of crimes within this category (5% of total hate crimes), the estimates presented in Table G.3 are broadly consistent with our main findings on total hate crime: crimes jump at the minority victory threshold.

<sup>25</sup>Race for the UK criminal justice system agencies means any group defined by race, color, nationality or ethnic or national origin.

<sup>26</sup>https://www.met.police.uk/advice/advice-and-information/hco/hate-crime/ what-is-hate-crime/

RD	se	p-	95%	mean	$\operatorname{sd}$	MSE-	eff.	Ν	$\operatorname{month}$
estimate		value	$\operatorname{CI}$	$\operatorname{control}$	effect	opt bw	Ν		
-0.0003	0.001	0.909	[-0.002, 0.003]	0.006	-0.045	20.56	192	1040	1
0.0010	0.001	0.160	[-0.001, 0.004]	0.005	0.154	21.76	303	1560	2
0.0026	0.001	0.000	[0.001, 0.005]	0.004	0.439	18.66	360	2080	3
0.0011	0.001	0.105	[-0.000, 0.003]	0.005	0.185	23.95	540	2600	4
0.0009	0.001	0.128	[-0.000, 0.003]	0.005	0.141	18.62	540	3120	5
0.0017	0.001	0.023	[0.000, 0.005]	0.004	0.242	15.10	490	3640	6
0.0020	0.001	0.010	[0.001, 0.005]	0.004	0.280	14.58	544	4160	7
0.0027	0.001	0.000	[0.001, 0.005]	0.004	0.376	13.63	558	4680	8
0.0026	0.001	0.000	[0.001, 0.005]	0.004	0.349	13.04	580	5200	9

Table G.3: Ethnic minority victory effects on violent hate crimes

Notes: The dependent variable is monthly hate crimes within the category of 'violence against the person with injury' per 1000 residents in a constituency. RD estimate is computed with local-linear regression within a symmetric MSE-optimal bandwidth. se is the conventional standard error, p-value and 95% CI are robust bias-corrected. mean control indicates the average monthly hate crime rate in constituencies where ethnic minorities barely lose, sd effect presents the RD estimate in standard deviations, MSE-opt bw is the MSE-optimal bandwidth of vote-share winning margin around the victory threshold, eff. N is the sample size within the MSE-optimal bandwidth and N is the sample size. The model specification includes controls: an indicator of whether the candidate is the incumbent, constituency vote share for UKIP and BNP in the previous election, constituency share that is ethnic minority, young population, single, with social grade DE, unemployed, population density, and share of households with 3 or more deprivations, and in social tenure. Standard errors are clustered by constituency-election. Hate crime data are from Home Office, ethnic background of candidates is constructed by the authors, and constituency characteristics from 2011 UK Decennial Census.

### H Subgroup effects on hate crime

We conduct four subgroup analyses. First, in Figure H.2a (right side) we show that the effect of a minority candidate victory in close parliamentary elections on hate crime is concentrated in constituencies that experience a larger than median increase in the number of migrants in the decade preceding the elections. In contrast, while we find that the effect on hate crimes is larger in constituencies that have experience larger than median increase in their unemployment rate in the decade preceding the election versus those experiencing relatively low unemployment rate, the difference between those two coefficients is not statistically significant (Figure H.2a, left side).

Second, we assess whether candidates with a Muslim background trigger a stronger hate crime response. Because we are able to code religion only for 23% of the candidates-contituency-election years, for this analysis, we impute a candidate's religion based on their region of origin, that is, we assign to each candidate the main religion in their region. 19% of candidates-contituency-election years (from 2010-2019) are determined to be Muslim, and the rest are Christian, Buddhist, or Hindu. The results in Figure H.1 suggest that the minority victory effects on hate crime are concentrated in constituencies with candidates from regions where the main religion is Islam (the difference in coefficients is statistically significant at the 0.1 level; t = 1.76).

Third, in Figure H.2b we show that minority migrant victory only has a positive effect on hate crime incidence when the candidate hails from a left- but not a right-wing party. We further show in Figure H.3 that these effects are not driven by a candidate's political affiliation only, but by the interaction between party affiliation and minority background. Particularly, we repeat the RD analysis but using races in which only white candidates stand for Parliament. Here, the running

variable is the difference between the vote share of a white Labour candidate against the strongest white contestant. We do not find that a white Labour close victory increases hate crimes after the election; the coefficients are close to zero and not statistically significant. Finally in Figure H.2c we demonstrate that when controlling for whether the constituency was represented in the past by a minority candidate, the size of the effect shrinks quite a bit in the first 5 post-election months.



Notes: Points are RD estimates of the effect of an ethnic minority victory and lines 95% robust bias-corrected confidence intervals.

Figure H.1: Effects on hate crime by religious background of candidates



(a) Effects on hate crime by local conditions

(b) Effects on hate crime by (c) Effects on hate crime: conpolitical ideology of candidate's trolling for history of an ethnic party minority MP

Figure H.2: Subgroup effects on hate crime

# I Minority victory effects on mass public attitudes

Moving to mass public opinion, we report below a set of placebo and falsification tests that establish the validity of the RD design (sections I.1–I.4), and the results' robustness to alternative specifica-

Notes: Points are RD estimates of the effect of an ethnic minority victory on hate crimes per 1000 residents and lines 95% robust bias-corrected confidence intervals.



Notes: Points are RD estimates of the effect of a victory of a white Labour candidate and lines 95% robust biascorrected confidence intervals.

Figure H.3: White Labour victory effects on hate crime

tions (section I.5). We further report the main RD results in tabular form and the robustness of those results to alternative survey questions in section I.6.

#### I.1 Continuity of placebo outcomes

We test whether an index of left-right views is discontinuous at the threshold where constituencies go from electing a dominant group candidate to electing a minority candidate. The rationale for using ideology as a placebo outcome is that it is expected to be strongly correlated with attitudes towards immigrants and ethnic minorities, but as ideology is sticky is not expected to be affected by the ethnic identity of the winning candidate. Figure I.1 reveals no discontinuity in ideology at the threshold where minority candidates win a seat in Parliament. These tests suggest that the validity of the design holds.



(a) Effects on ideology (placebo outcome) (b) Comparison of main and placebo effects

Notes: In (a) lines represent respondents' average left–right view (with 95% confidence intervals) from local linear regression with covariate adjustment fitted to the sample of units whose vote-share winning margin is within the MSE-optimal bandwidth of +/- 15.7 percentage points around the victory threshold. Points are the average left–right view for equally spaced mimicking-variance bins. In (b) points are RD estimates of the effect of an ethnic minority victory and lines 95% robust bias-corrected confidence intervals.

Figure I.1: Ethnic minority victory effects on ideology (placebo outcome)

### I.2 Density of the running variable

Figure I.2 reveals no evidence of sorting around the cutoff. Even though there appears to be a jump in the density functions of respondents at the threshold in which constituencies go from electing a dominant group candidate to electing a minority candidate, the confidence intervals of these density functions completely overlap and the p-value of the continuity test indicates that we cannot reject the null of continuity of the density functions. The results of these tests indicate no manipulation of the election results.



Notes: Tests for manipulation of the election results by assessing continuity of the density functions at the cutoff with local polynomial density estimators and robust bias-corrected inference.

Figure I.2: Continuity in the density of survey respondents around the cutoff

#### I.3 Continuity of predetermined variables

In Figure I.3 we present results for the tests on the continuity of predetermined variables around the threshold where minority candidates win a seat in Parliament. We find that 2 of a total of 36 covariates show statistically significant discontinuities in *means* with the test employing local linear regression within an MSE-optimal bandwidth controlling for the FDR with the Benjamini–Hochberg procedure (Figure I.3a). This number of discontinuous covariates is equivalent to the average number of false rejections (which is 1.8). Furthermore, with the permutation test for continuity in the *distribution* of observations around the cutoff, we find that only 1 of the 35 predetermined variables are discontinuous at the cutoff (Figure I.3b). The results from both tests suggest that there were no systematic discontinuities in the covariates at the threshold were minorities win political office, and that therefore the continuity assumption of the potential outcome functions is likely to hold.



(a) Continuity of means using local linear regression

(b) Continuity of distribution using asymptotic permutation test

Notes: Test for continuity of candidate and constituency predetermined background characteristics in (a) using a local linear regression with a symmetric MSE-optimal bandwidth as implemented by the **rdrobust** R package and in (b) using an asymptotic permutation test comparing the distribution of observation near the cutoff as implemented by the **RATest** R package. The vertical line in (a) indicates a *p*-value = 0.0012, which is the threshold for the p-values when controlling the false discovery rate with the Benjamini–Hochberg procedure, and in (b) *p*-value = 0.008.

Figure I.3: Continuity of predetermined variables around the cutoff

### I.4 Sensitivity to the choice of bandwidth and polynomials

The results on mass public opinion are not sensitive to the choice of bandwidth. In Figure I.4 we present the minority victory effects on the main attitudinal outcome for different values of the bandwidth. We fit our lineal model to the sample of observations within the CER- and MSE-optimal bandwidths, half and twice their size. We find that the results are broadly consistent with the findings obtained with the optimal MSE bandwidth. In Table I.1, we show that the results are robust to fitting quadratic polynomials.



Notes: Points are RD estimates of the effect of an ethnic minority victory on inclusionary attitudes towards immigrants and lines 95% robust bias-corrected confidence intervals. MSE stands for mean squared error optimal bandwidth and CER refers to a bandwidth that minimizes the coverage error from the robust biased corrected confidence intervals obtained with the MSE-optimal bandwidth. The values next to the 'CER', 'MSE' labels indicate the bandwidth size.

Figure I.4: Sensitivity to the choice of bandwidth

Table I.1: Ethnic minority victory effects on mass inclusionary attitudes towards immigrants

RD	se	p-	95%	mean	sd	MSE-	eff.	Ν	COV	smpl	pol
estimate		value	$\operatorname{CI}$	$\operatorname{control}$	effect	opt bw	Ν				
-0.255	0.065	0.000	[-0.426, -0.150]	0.434	-0.562	14.42	291	1924	no	f	1
-0.258	0.065	0.000	[-0.425, -0.150]	0.440	-0.560	15.14	288	1876	no	с	1
-0.295	0.052	0.000	[-0.428, -0.210]	0.445	-0.646	14.33	283	1876	yes	с	1
-0.270	0.073	0.001	[-0.454, -0.127]	0.461	-0.589	21.99	403	1924	no	f	q
-0.277	0.071	0.000	[-0.460, -0.129]	0.469	-0.605	22.89	399	1876	no	с	q
-0.313	0.063	0.000	[-0.433, -0.137]	0.446	-0.687	17.61	345	1876	yes	с	q

Notes: The dependent variable is a dummy indicating whether a survey respondent do not thinks that "too many immigrants have been let into the country". RD estimate is computed with local-linear regression within a symmetric MSE-optimal bandwidth when pol is l, and with a quadratic polynomial when pol is q. se is the conventional standard error, p-value and 95% CI are robust bias-corrected. mean control indicates the average proportion of respondents who do not think that "too many immigrants have been let into the country" in constituencies where ethnic minorities barely lose. sd effect presents the RD estimate in standard deviations, MSE-opt bw is the MSE-optimal bandwidth of vote-share winning margin around the victory threshold, eff. N is the sample size within the MSE-optimal bandwidth and N is the sample size. cov is a vector of controls including an indicator of whether the candidate is the incumbent, whether the survey respondent is male, young, single, employed, owns a house, and the constituency vote share for UKIP and BNP in the previous election, share that is foreign born, and share of households with 3 or more deprivations. smpl is the used sample: f stands for full sample and c for a complete cases sample with no missing values for respondent's predetermined variables. Standard errors are clustered by constituency-election. Survey data are from the British Election Study, ethnic background of candidates is constructed by the authors, and constituency characteristics from 2001 and 2011 UK Decennial Census.

#### I.5 Controlling for candidate's political party

We isolate the ethnic identity of candidates from their political party affiliation from the attitudinal response by controlling for party dummies. In Figure I.5 we present the ethnic minority victory effects from a specification that controls for party dummies. The coefficient is very close in magnitude (somewhat bigger) to that obtained with our main specification shown in Figure 2, suggesting that the exclusionary attitudinal response is not driven by the political affiliation of the candidates.



Figure I.5: Isolating candidates' ethnic identity from their political party in the attitudinal response

Notes: Lines represent the average proportion of respondents who do not think that "too many immigrants have been let into the country" (with 95% confidence intervals) from local linear regression with covariate adjustment (including party dummies) fitted to the sample of units whose vote-share winning margin is within the MSE-optimal bandwidth of +/- 10.3 percentage points around the victory threshold. Points are the average proportion of respondents who do not think that "too many immigrants have been let into the country" for equally spaced mimicking-variance bins.

#### I.6 Additional attitudinal outcomes

To validate the robustness of our results beyond our main attitudinal outcome (provided in tabular form in Table I.2), we compute two additional outcomes that use all other available survey items on attitudes towards immigration and ethnic minorities. The first outcome, *economy*, is an item that asks survey respondents whether immigrants are good for Britain's economy. This item is included in all survey years, but the wording of questions and answers (and their range) changes across time. The second outcome is an *index* that includes stereotypical beliefs about immigrants and attitudes towards accommodating diversity. However, this items are only included for a subsample of 60% of those who answered the 2017, 2019 surveys. In Table I.3 we present the effect estimates on these two additional attitudinal outcomes discussed further in Appendix C. We include as well the estimates on our main outcome as benchmark.

RD	se	p-	95%	mean	$\operatorname{sd}$	MSE-	eff.	Ν	cov	$\operatorname{smpl}$	
estimate		value	$\operatorname{CI}$	$\operatorname{control}$	effect	opt bw	Ν				
-0.255	0.065	0.000	[-0.426, -0.150]	0.434	-0.562	14.42	291	1924	no	f	
-0.258	0.065	0.000	[-0.425, -0.150]	0.440	-0.560	15.14	288	1876	no	с	
-0.295	0.052	0.000	[-0.428, -0.210]	0.445	-0.646	14.33	283	1876	yes	с	

Table I.2: Ethnic minority victory effects on mass inclusionary attitudes towards immigrants

Notes: The dependent variable is a dummy indicating whether a survey respondent do not thinks that "too many immigrants have been let into the country". RD estimate is computed with local-linear regression within a symmetric MSE-optimal bandwidth. se is the conventional standard error, p-value and 95% CI are robust bias-corrected. mean control indicates the average proportion of respondents who do not think that "too many immigrants have been let into the country" in constituencies where ethnic minorities barely lose. sd effect presents the RD estimate in standard deviations, MSE-opt bw is the MSE-optimal bandwidth of vote-share winning margin around the victory threshold, eff. N is the sample size within the MSE-optimal bandwidth and N is the sample size. cov is a vector of controls including an indicator of whether the candidate is the incumbent, whether the survey respondent is male, young, single, employed, owns a house, and the constituency vote share for UKIP and BNP in the previous election, share that is foreign born, and share of households with 3 or more deprivations. smpl is the used sample: f stands for full sample and c for a complete cases sample with no missing values for respondent's predetermined variables. Standard errors are clustered by constituency-election. Survey data are from the British Election Study, ethnic background of candidates is constructed by the authors, and constituency characteristics from 2001 and 2011 UK Decennial Census.

Table I.3: Ethnic minority victory effects on mass attitudes towards immigrants

se	p-	95%	mean	$\operatorname{sd}$	MSE-	eff.	Ν	out	cov	$\operatorname{smpl}$
	value	$\operatorname{CI}$	$\operatorname{control}$	effect	opt bw	Ν				
0.118	0.003	[-0.640, -0.134]	3.438	-0.252	11.69	239	2111	economy	no	f
0.120	0.001	[-0.678, -0.167]	3.468	-0.284	11.39	233	2058	economy	no	с
0.063	0.000	[-0.645, -0.380]	3.336	-0.367	8.05	133	2058	economy	yes	с
0.065	0.000	[-0.426, -0.150]	0.434	-0.562	14.42	291	1924	entry	no	f
0.065	0.000	[-0.425, -0.150]	0.440	-0.560	15.14	288	1876	entry	no	с
0.052	0.000	[-0.428, -0.210]	0.445	-0.646	14.33	283	1876	entry	yes	с
0.201	0.510	[-0.582, 0.289]	2.225	-0.157	18.83	170	899	index	no	f
0.203	0.408	[-0.624, 0.253]	2.263	-0.202	18.70	161	865	index	no	с
0.186	0.754	[-0.453, 0.329]	2.274	-0.099	15.66	145	865	index	yes	с
	se 0.118 0.120 0.063 0.065 0.065 0.052 0.201 0.203 0.186	se p-value   0.118 0.003   0.120 0.001   0.063 0.000   0.065 0.000   0.052 0.000   0.201 0.510   0.203 0.408   0.186 0.754	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						

Notes: The dependent variable is indicated by *out*: *economy* is respondent's agreement with the statement "immigration is good for Britian's economy" on a 5-point Likert scale, *entry*, which is our main outcome of interest and is included here as benchmark, is a dummy indicating whether a survey respondent *do not* thinks that "too many immigrants have been let into the country", and *index* aggregates agreement with five statements about immigrants and ethnic minorities; higher values indicate more inclusionary attitudes. *RD estimate* is computed with local-linear regression within a symmetric MSE-optimal bandwidth. *se* is the conventional standard error, *p-value* and 95% *CI* are robust bias-corrected. *mean control* indicates the average proportion of respondents who *do not* think that "too many immigrants have been let into the country" in constituencies where ethnic minorities barely lose. *sd effect* presents the RD estimate in standard deviations, *MSE-opt bw* is the MSE-optimal bandwidth of vote-share winning margin around the victory threshold, *eff. N* is the sample size within the MSE-optimal bandwidth and *N* is the sample size. *cov* is a vector of controls including an indicator of whether the candidate is the incumbent, whether the survey respondent is male, young, single, employed, owns a house, and the constituency vote share for UKIP and BNP in the previous election, share that is foreign born, and share of households with 3 or more deprivations. *smpl* is the used sample: *f* stands for full sample and *c* for a complete cases sample with no missing values for respondent's predetermined variables. Standard errors are clustered by constituency-election. Survey data are from the British Election Study, ethnic background of candidates is constructed by the authors, and constituency characteristics from 2001 and 2011 UK Decennial Census.

# J Media tone towards migrant groups

We report placebo and falsification tests that establish the validity of the RD design and the robustness of our results (sections J.1–J.6), and the main RD results in tabular form (section J.7).

#### J.1 Continuity of placebo outcomes

We use as a placebo measure the tone of news article mentions about countries and nationalities from North America, Western Europe, Australia and New Zealand that co-occur with mentions about the candidate's constituency. The placebo outcome is thus the monthly ratio of negative mentions to total mentions about these countries and nationalities in the candidate's constituency. In Figure J.1a we illustrate the RD estimates of the effect of a minority win on this placebo outcome three months from the election, and in Figure J.1b we present the estimates across months after the election, and we compare them to the estimates of the effects on media tone about the candidate's ethnic group (our main outcome variable). Both figures show no discontinuity in the tone of mentions about countries and nationalities from North America, Western Europe, Australia and New Zealand at the threshold where minorities win political office, suggesting that the validity of the design holds.



(a) Effect on proportion of negative mentions about placebo groups

(b) Comparison of main and placebo effects

Notes: In (a) lines represent monthly proportion of negative mentions about countries and nationalities from North America, Western Europe, Australia and New Zealand in the candidate's constituency (with 95% confidence intervals) from local linear regression with covariate adjustment fitted to the sample of units whose vote-share winning margin is within the MSE-optimal bandwidth of +/- 12.1 percentage points around the victory threshold. Points are the average monthly proportion of negative mentions about countries and nationalities from North America, Western Europe, Australia and New Zealand in the candidate's constituency for equally spaced mimicking-variance bins. In (b) points are RD estimates of the effect of an ethnic minority victory and lines 95% robust bias-corrected confidence intervals.

Figure J.1: Ethnic minority victory effects on media tone of placebo groups

#### J.2 Continuity of main outcome before general election

We test whether the proportion of negative mentions about a candidate's ethnic group is discontinuous at the minority victory threshold before the general election. We find no discontinuities at the threshold before the election—the estimates of the effect of a minority win are centered around zero (and are not statistically significant)—except for two months before the election; when there is a jump at the threshold in the proportion of negative mentions about the winner's ethnic group. Such an increase however, is only distinguishable from zero one month prior to the election (Figure J.2). Campaigns officially begin with the dissolution of Parliament, which is about one month and a half prior to the election. It is possible that there is an anticipatory reaction from the media to minorities winning a seat in Parliament, as the media is more informed than the general public. It is also possible that the media responds to minority candidacies with a more negative coverage of candidates who are more likely to win, with the objective of affecting the election results. Overall, this placebo test increases our confidence about the robustness of our results. It suggests that the estimates of the minority victory effects on media tone about a candidate's ethnic group are explained by the election and not by other dynamics in constituencies where minorities win.



Notes: Points are RD estimates of the effect of an ethnic minority victory and lines 95% robust bias-corrected confidence intervals.

Figure J.2: Ethnic minority victory effects on media tone before and after the election

#### J.3 Density of the running variable

Figure J.3 reveals no evidence of sorting around the cutoff. Even though there appears to be a jump in the density functions of candidates at the threshold in which constituencies go from electing a dominant group candidate to electing a minority candidate, the confidence intervals of these density functions completely overlap and the p-value of the continuity test indicates that we cannot reject the null of continuity of the density functions. In addition, the p-value for the (McCrary, 2008) sorting test is 0.82, indicating that we cannot reject the null hypothesis of continuity of the density of candidates at the threshold. The results of these tests indicate no manipulation of the election results.



Notes: Tests for manipulation of the election results by assessing continuity of the density functions at the cutoff with local polynomial density estimators and robust bias-corrected inference.

Figure J.3: Continuity in the density of candidates around the cutoff

#### J.4 Continuity of predetermined variables

In Figure we present results for the tests on the continuity of predetermined variables around the threshold where minority candidates win a seat in Parliament. We find that 2 of a total of 32 covariates show statistically significant discontinuities in *means* with the test employing local linear regression within an MSE-optimal bandwidth (Figure J.4a). Furthermore, controlling for the FDR with the Benjamini–Hochberg procedure we do not find discontinuous variables. Moreover, with the permutation test for continuity in the *distribution* of observations around the cutoff, we find that only 1 of the 31 predetermined variables are discontinuous at the cutoff, and zero when we control the FDR with the Benjamini–Hochberg procedure (Figure J.4b). This number of discontinuous covariates is equivalent to the average number of false rejections (which is 1.55). The results from both tests suggest that there were no systematic discontinuities in the covariates at the threshold were minorities win political office, and that therefore the continuity assumption of the potential outcome functions is likely to hold.



(a) Continuity of means using local linear regression

(b) Continuity of distribution using asymptotic permutation test

Notes: Test for continuity of candidate and constituency predetermined background characteristics in (a) using a local linear regression with a symmetric MSE-optimal bandwidth as implemented by the **rdrobust** R package and in (b) using an asymptotic permutation test comparing the distribution of observation near the cutoff as implemented by the **RATest** R package. The vertical line indicates p-value = 0.05. The threshold for the p-values when controlling the false discovery rate with the Benjamini–Hochberg procedure is zero.

Figure J.4: Continuity of predetermined variables around the cutoff

#### J.5 Sensitivity to the choice of bandwidth and order of polynomial

In Figure J.5a we test for sensitivity of the results to the choice of bandwidth, using CER- and MSE-optimal bandwidths, half and twice their size. We find that the results are consistent with the findings obtained with the optimal MSE bandwidth —there is an increase in the proportion of negative mentions about a candidate's ethnic group at the victory threshold. In Figure J.5b we show that the results are robust to fitting quadratic polynomials. These two results strengthen the validity of our findings on media tone.



Notes: (a) tests for sensitivity to the choice of bandwidth. MSE stands for mean squared error optimal bandwidth and CER refers to a bandwidth that minimizes the coverage error from the robust biased corrected confidence intervals obtained with the MSE-optimal bandwidth. The values next to the 'CER', 'MSE' labels indicate the bandwidth size. (b) tests for sensitivity to the choice of polynomial order by comparing estimates with local-linear and quadratic polynomials.



### J.6 Controlling for candidate's political party

We further isolate the ethnic identity of candidates from their political party affiliation from the media negative coverage response by controlling for party indicator variables. In Figure J.6 we compare the RD estimates of our main specification to the estimates from a specification controlling for party dummies. The coefficients are very close in magnitude, suggesting that the media response is not explained only by the political affiliation of the candidates.



Figure J.6: Isolating the ethnic identity of candidates from their political party

Notes: Points are RD estimates of the effect of an ethnic minority victory on hate crimes per 1000 residents and lines 95% robust bias-corrected confidence intervals.

#### J.7 Main RD results in tabular form

Table J.1 displays all statistics of interest related to the estimates of the effect of a minority win on media tone.

RD	se	p-	95%	mean	sd	MSE-	eff.	Ν	COV	month
estimate		value	$\operatorname{CI}$	$\operatorname{control}$	effect	opt bw	Ν			
0.080	0.106	0.331	[-0.104, 0.309]	0.189	0.269	24.77	142	438	no	1
0.228	0.098	0.008	[0.069, 0.454]	0.115	0.998	14.37	70	438	yes	1
0.123	0.097	0.078	[-0.019, 0.362]	0.135	0.417	14.34	138	876	no	2
0.297	0.087	0.000	[0.171, 0.512]	0.025	1.088	10.53	92	876	yes	2
0.102	0.101	0.165	[-0.058, 0.339]	0.217	0.321	16.44	240	1314	no	3
0.210	0.094	0.009	[0.062, 0.432]	0.193	0.674	12.13	165	1314	yes	3
0.121	0.072	0.030	[0.015, 0.297]	0.210	0.393	14.57	284	1752	no	4
0.216	0.075	0.001	[0.103, 0.397]	0.183	0.724	11.65	208	1752	yes	4
0.144	0.075	0.016	[0.033, 0.329]	0.176	0.474	13.42	320	2190	no	5
0.234	0.074	0.000	[0.126, 0.417]	0.159	0.781	10.69	235	2190	yes	5
0.124	0.076	0.040	[0.007, 0.305]	0.169	0.419	14.59	432	2628	no	6
0.203	0.069	0.001	[0.105, 0.377]	0.163	0.699	11.89	318	2628	yes	6
0.065	0.067	0.195	[-0.045, 0.219]	0.189	0.223	16.51	567	3066	no	7
0.125	0.062	0.017	[0.026, 0.267]	0.180	0.428	14.53	497	3066	yes	7
0.043	0.056	0.258	[-0.046, 0.173]	0.196	0.145	16.45	648	3504	no	8
0.076	0.050	0.070	[-0.007, 0.190]	0.197	0.255	16.60	656	3504	yes	8
0.068	0.057	0.111	[-0.021, 0.201]	0.177	0.227	15.41	693	3942	no	9
0.137	0.047	0.000	[0.073, 0.259]	0.169	0.463	14.23	612	3942	yes	9
0.042	0.054	0.267	[-0.046, 0.167]	0.193	0.140	16.79	830	4380	no	10
0.096	0.047	0.013	[0.024, 0.207]	0.186	0.318	15.61	770	4380	yes	10

Table J.1: Ethnic minority victory effects on media tone about migrant groups

Notes: The dependent variable is the monthly proportion of negative mentions in news articles about a candidate's ethnic group. RD estimate is computed with local-linear regression within a symmetric MSE-optimal bandwidth. se is the conventional standard error, p-value and 95% CI are robust bias-corrected. mean control indicates the average proportion of negative news article mentions about the barely losing candidate's ethnic group. sd effect presents the RD estimate in standard deviations, MSE-opt bw is the MSE-optimal bandwidth of vote-share winning margin around the victory threshold, eff. N is the sample size within the MSE-optimal bandwidth and N is the sample size. cov is a vector of controls including whether the candidate is the incumbent, from a left-leaning party, a woman, a first-generation immigrant, the constituency vote share for UKIP and BNP in the previous election, constituency share that shares the candidate's ethnic background, shares of foreign born, with a minority religion, young population, single, with level 1 qualifications, with social grade DE, unemployed, and share of households with 4 or more deprivations, and in social tenure. Standard errors are clustered by constituency-election. News articles were extracted from Common Crawl, ethnic background of candidates is constructed by the authors, and constituency characteristics from 2001 and 2011 UK Decennial Census.

# K Explaining effects on media attention and tone

We assess whether there is an association between the political alignment of newspapers and the increase in speech about migrant groups with a specific valence (negative and positive). To do so, we classify the newspapers into right-wing or not right-wing using *Wordscores* (Laver, Benoit and

Garry, 2003) (as implemented by the R package quanteda) with 2017 party manifestos as reference texts and expert surveys as exogenous scores. The party manifestos are from Burst et al. (2020) and the expert surveys from Norris (2020). The party scores are the average value of experts' party placements on economic and social issues. We consider that all newspapers with computed scores to the right of the most left-leaning self-identified right-wing newspaper are right-wing. This classification has an accuracy of 73%, measured against newspaper self-identification, which we extract from Wikipedia infoboxes, and is available for 22/156 newspapers.

In Figure K.1a we present the RD estimates of the effects of a minority win on valence of migrant groups for newspapers that support a candidate's party (based on political alignment) and non-supportive papers. These estimates suggest that the negative mentions are indeed driven by newspapers that do not support the parties —the minority victory effects on the proportion of negative mentions are bigger for mentions from non-supportive newspapers than supportive newspapers—but the coefficients also suggest that non-supportive newspapers contribute with the positive mentions. Furthermore, when we compute the minority win effects for right- and left-wing newspapers (Figure K.1b), we find evidence that the increase in negative mentions is mostly driven by right-wing newspapers, and that at least for the first quarter after the election, left-wing newspapers contribute the most to the increase in positive mentions about a candidate's ethnic group. Moreover, the estimates of the RD effects of a minority win on the tone of newspapers by their circulation (above or below 25,000 copies), suggest that during the first months after the election the positive mentions about a winning candidate's ethnic group are contributed by papers with a circulation of more than 25,000 copies, while smaller papers drive the negative mentions (Figure K.1c).



(a) Effects by newspaper-party (b) Effects by newspaper ideol-(c) Effects by newspaper circulapolitical alignment ogy tion

Notes: Points are RD estimates of the effect of an ethnic minority victory and lines 95% robust bias-corrected confidence intervals.

Figure K.1: Ethnic minority victory effects on media tone by newspaper-party political alignment, paper ideology, and circulation
month	(negative - positive)	(negative - neutral)	(positive - neutral)
1	0.76	2.50	1.72
2	1.90	2.83	0.62
3	0.78	1.68	1.25
4	0.44	2.11	1.96
5	0.78	1.88	1.44
6	0.84	1.41	0.88
7	-0.33	0.75	1.29
8	-1.05	-0.03	0.91
9	0.59	1.00	0.55
10	-0.14	0.63	0.87

Table K.1: Minority victory effects across media valence categories

Notes: Values indicate the *t*-statistic of the difference between the RD estimates of the effects of a minority win on the proportion of negative, positive, and neutral mentions about a candidate's ethnic group in the media. Values larger than the critical value of 1.96 are statistically significant.

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